Stone Container Corporation
Containerboard and Paper Division
Mullan Road P.O. Box 4707 Missoula, Montana 59806-4707

Missoula Mill

406.626.4451
406.626.5986 Fax

August 10, 1995

Lou Thompson
DEQ - Solid Waste Division
P.O. Box 131
Polson, MT 59860

Dear Mr. Thompson:

As we discussed on May 15, 1995, Stone Container Corporation has completed all of the landfill closure work with the seeding of the landfills being completed on May 13, 1995.

Attached is a report summarizing all of the closure work activities that has occurred since the landfills were first attempted to be permitted on July 27, 1992.

By submitting this information, Stone requests to have the landfill's officially closed. If you have any questions or need any more information, please call me at (406) 626-4451.

Sincerely,

Laura Kosmalski

Laura Kosmalski
Environmental Engineer

cc: Stuart Willhite Kohl
Scott Marxer Anderson

STONE CONTAINER CORPORATION

Class II Landfill Closure Report

August 10, 1995

Background

On July 27, 1992, Stone Container Corporation (Stone) applied for a permit for it's onsite landfills. This application was required as a result of House Bill 330 which removed the exemption for private landfills from being permitted. The three landfill sites of issue were 1) General Refuse (Pond A), 2) Ash/Grits (Pond 6), and 3) Asbestos/Ragger Wire (Sites F & C). Please note copies of all correspondence and test results are included in the attached Appendix. This includes copies of the periodic updates which Stone had agreed to submit during the course of this project.

On February 11, 1993, The Solid Waste Division (SWD) responded to the permit application with a notice of an incomplete application. Due to the difficult obstacles noted in this correspondence, Stone decided to close the landfills by the October 9, 1993 deadline for the new Subtitle D landfill regulations. The spring and summer of 1993 were spent hiring a consultant (Damschen & Assoc.) and determining the most feasible means of disposing of the mill's Class II waste streams.

Pre-Closure Work

In June, WGM Group was hired to take an aerial photo of the landfill sites. This photo was used to develop the topographical map which was necessary to develop the closure plan. The map and closure plan were submitted to the SWD on September 19, 1993 by Barry Damschen & Assoc. The SWD approved this plan in a letter dated November 9, 1993 and closure work began in December of 1993.

Closure

On October 8, 1993, Stone ceased using the three onsite landfills and all mill Class II waste began being hauled and disposed of by BFI. The old mill landfills were roped off and marked with signs labelled "No dumping". As specified in Stone's approved closure plan, approximately 131,000 yd^3 of clay had to be located in order to cover the area with 18 inches of clay. The additional 6 inches of topsoil was to be obtained from areas on mill site. Two sources of available clay were identified. One was "Gursky Basin" clay and the other was "Steigers" clay. The Gursky Basin clay composed part of a bank enclosing a wastewater storage pond. Steiger's clay was clay from the property of Keith Steigers.

Permeability Tests were performed on both sources of clay (maximum allowable permeability of 1.0×10^{-5} cm/sec).

SWB found all work satisfactory including test borings that were drilled from each of the three landfill sites. In a letter dated May 27, 1994 from the SWD to Stone, it was indicated that the additional compaction tests were sufficient to document proper compaction and that no further testing would be required.

Completion/Inspection

A letter was sent to the SWD on September 30, 1994 indicating that the construction work (contouring, clay and soil application) had been completed and that Stone planned to begin seeding in the spring of 1995.

On October 12, 1994, representatives of the SWD made another visit to inspect the work that had been completed. The SWD found all work satisfactory including the application of topsoil to the final clay cover. A letter dated November 16, 1994 from the SWD indicated that Stone had satisfactorily completed the construction work in the closure areas and that it was acceptable to complete the final task of seeding in the spring of 1995.

Revegetation

The September 30, 1995 letter sent to the SWD outlined the plan for seeding the landfills. The spring of 1995 was chosen over the fall of 1994 due to extremely low rainfall during the summer and fall of 1994. Stone planned to take advantage of spring and early summer rains of 1995 for seed germination. The seed mixture chose was the same as that which was used to revegetate the land that was the source of the clay. The seed mixture was as follows:

Species	#'s PLS/Acre
Potomac Orchardgrass	6.0
Manchar Smooth Brome	5.0
Alta Tall Fescue	5.0
Timothy	1.0
	17.0

#'s PLS/Acre is pounds of pure live seed per acre.

During the last week of April 1995, work again began on the landfills. The cap was inspected for erosion and the edges smoothed out where any was noted. The soil was then prepared for seeding. The seeding began in May and was completed on May 11th, 1995. This was discussed during a telephone conversation on May 15th, 1995 during which you requested that Stone submit a summary report of the closure activities.

Conclusion

To date, Stone Container has completed and met all requirements set forth by the Solid Waste Division of the Department of Health and Environmental Sciences for the closure of a landfill that ceased receiving waste prior to the October 9, 1993 deadline. This report summarized all activities engaged in to reach this point. Stone requests that the landfills be officially designated closed.

Stepp, Tim 3/14/2011

From: Stepp, Tim
Sent: Monday, March 14, 2011 10:37 AM
To: Thompson, Ricknold
Cc: Hendrickson, Mary
Subject: RE: Smurfit-Stone

Rick,

I remember Damschen's proposal for a new Stone Class III (NOT Class II) quite well and assisted Michele. I am surprised by the continued confusion. The Solid Waste Program was always clear with Barry, Mr. Briggs, Rod, and Ed Coleman that the Class III license application (12/13/05) for the Petersen pits would be denied unless appropriate backfilling provided adequate separation from shallow groundwater. The engineer's cross-sections and photos of the pits show standing water about 8-10 feet below average grade. Pat Crowley confirmed our denial by email to Rod on May 10, 2006. Smurfit-Stone never replied to Pat or Michele.

Regarding the rejuvenated idea that illegal disposal of significant wood waste has impacted the pit, Michele's inspection (report 7/17/06) found no such problem. As Rod documents, the report from testing conducted by MCS Environmental verified this conclusion (9/17/07). Michele also indicated on site to Mr. Briggs (Smurfit-Stone Env. Contact) that Class III landfill license will be denied because it may not be located within either the 100-yr floodplain or standing water, as proposed by Stone.

The Solid Waste Class III license was issued to Stone on 1/10/94 and a transfer to Smurfit-Stone was not required in 1999. The existing flooded pit was adequately backfilled prior to disposal of Group III wastes. Closure of the site is still required according to the approved Closure Plan on file. The deed notation has been approved.

All other disposal sites at the Missoula Mill stopped accepting waste and were closed by July of 1994 in compliance with schedules given in the new Solid Waste rules (post federal Subtitle-D regulations). The new closure criteria did not apply to those pre-1993 sites: disposal pits at Pond A area, Pond 6 area, and Area F & C were closed out. SWP has no knowledge of a Class II facility or waste at the Stone Container site.

Hope this clears up the SWP issues. Thanks.

Tim

TIM STEPP
Environmental Engineer - Solid Waste Program
Waste & Underground Tank Management Bureau
Permitting & Compliance Division

Montana Department of
ENVIRONMENTAL QUALITY

Lee Metcalf Building
1520 East Sixth Ave
P.O. Box 200901
Helena, MT 59620-0901

Phone 406-444-4725
Fax 406-444-1374
email: tstepp@mt.gov

From: Thompson, Ricknold

Montana Department of
ENVIRONMENTAL QUALITY
Brian Schweitzer, Governor
P. O. Box 200901 Helena, MT 59620-0901 (406) 444-2544 Website: www.deq.mt.gov

March 26, 2010

Neil Marxer
Smurfit-Stone Container Enterprises Inc.
P.O. Box 4707
Missoula, MT 59806-4707

Dear Mr. Marxer:

Montana Air Quality Permit #2589-15 is deemed final as of March 26, 2010, by the Department of Environmental Quality (Department). This permit is for a Kraft Pulp Mill. All conditions of the Department's Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For the Department,

Vickie Walsh
Air Permitting Program Supervisor
Air Resources Management Bureau
(406) 444-9741

Debbie Skibicki
Lead Environmental Engineer
Air Resources Management Bureau
(406) 444-1472

VW:DS
Enclosure

Montana Department of Environmental Quality
Permitting and Compliance Division

Montana Air Quality Permit #2589-15

Smurfit-Stone Container Enterprises Inc.
Missoula Mill
P.O. Box 4707
Missoula, MT 59806-4707

March 26, 2010

MONTANA AIR QUALITY PERMIT

Issued to: Smurfit-Stone Container Enterprises Inc.
P.O. Box 4707
Missoula, MT 59806-4707

Montana Air Quality Permit #2589-15
Administrative Amendment (AA)
Requests Received: 11/19/09 and 01/06/10
Department Decision on AA: 03/10/10
Permit Final: 03/26/10
AFS#: 063-0006

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to the Smurfit-Stone Container Enterprises Inc. (Smurfit-Stone) pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

SECTION I: Permitted Facilities

A. Facility/Location

The Smurfit-Stone kraft pulp and liner mill is located in Frenchtown. A list of permitted equipment can be found below.

1. Two Recovery Boilers

a. #4 Recovery Boiler has a capacity of 825 million British thermal units per hour (MMBtu/hr) input and is controlled with an electrostatic precipitator. The #4 Recovery Boiler has continuous emission monitors (CEMs) for total reduced sulfur (TRS), required by state permit.

b. #5 Recovery Boiler has a capacity of 330 MMBtu/hr input and is controlled with an electrostatic precipitator. This boiler is subject to New Source Performance Standards (NSPS, 40 Code of Federal Regulations (CFR) Part 60) and has CEMs for opacity and TRS. The #5 Recovery Boiler is subject to 40 CFR 60, Subpart BB.

2. Four Lime Kilns

a. #1 Lime Kiln has a capacity of 6.1 tons per hour of lime mud and is controlled with a wet venturi scrubber. The kiln has a CEM for TRS. The #1 Lime Kiln is currently curtailed as it does not meet the Maximum Achievable Control Technology (MACT) II requirements specified in 40 CFR 63, Subpart MM. The requirements of 40 CFR Part 63 must be met prior to restarting this equipment.

b. #2 Lime Kiln has a capacity of 6.1 tons per hour of lime mud and is controlled with a wet venturi scrubber. The kiln has a CEM for TRS. The #2 Lime Kiln is currently curtailed as it does not meet the MACT II requirements specified in 40 CFR 63, Subpart MM. The requirements of 40 CFR Part 63 must be met prior to restarting this equipment.

c. #3 Lime Kiln has a capacity of 15.6 tons per hour of lime mud and is controlled with a wet venturi scrubber. The kiln has a CEM for TRS.

3. A TRS CEM is required by state permit and federal regulation. This CEM shall conform to federal specifications as required by 40 CFR 60, Appendix B, Specification 5.

C. #1, #2, and #3 Lime Kilns

A TRS CEM is required by state permit for each kiln. This CEM is not required to conform to federal specifications.

D. #4 Lime Kiln (subject to 40 CFR 60, Subpart BB)

A TRS CEM is required by state permit and federal regulations. This CEM shall conform to federal specifications as required by 40 CFR 60, Appendix B, Specification 5.

E. Multi-fuel Boiler (subject to 40 CFR 60, Subpart D)

1. An SO_2 CEM is required by federal regulation and state permit when this boiler is fired on oil. This CEM shall conform to federal specifications as required by Specification 2 of 40 CFR 60, Appendix B.

2. A NO_x CEM is required by federal regulation and state permit. This CEM shall conform to federal specifications as required by Specification 2 of 40 CFR 60, Appendix B.

3. Either an O_2 or CO_2 CEM is required as provided in 40 CFR 60.45.

SECTION IV: Reporting Requirements

A. Operational and Emission Inventory Reporting Requirements

1. Smurfit-Stone shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but is not limited to, all sources of emissions identified in the emission inventory contained in the permit analysis and sources identified in Section I of this permit.

Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in the units required by the Department and shall include, but is not limited to, the following (ARM 17.8.505):

SOURCE	UNITS OF MATERIAL PROCESSED
a. Multi-fuel Boiler	Hog Fuel (including MDF pellets) - ton/yr Nat Gas - million cubic feet (MCF)/yr Fuel Oil (including recycled oil) - Mgal/yr Dewatered Sludge - ton/yr
b. Power Boiler	Nat Gas - MCF/yr
c. #4 Recovery Boiler	Black Liquor - ton/yr Nat Gas - MCF/yr Fuel Oil (including recycled oil) - Mgal/yr

d. #5 Recovery Boiler	Black Liquor - ton/yr Nat Gas - MCF/yr Fuel Oil (including recycled oil) - Mgal/yr
e. #1 Lime Kiln	Nat Gas - MCF/yr Fuel Oil (including recycled oil) - Mgal/yr Lime Mud - ton/yr Petrol Coke - ton/yr
f. #2 Lime Kiln	Nat Gas - MCF/yr Fuel Oil (including recycled oil) - Mgal/yr Lime Mud - ton/yr Petrol Coke - ton/yr
g. #3 Lime Kiln	Nat Gas - MCF/yr Fuel Oil (including recycled oil) - Mgal/yr Lime Mud - ton/yr Petrol Coke - ton/yr
h. #4 Lime Kiln	Nat Gas - MCF/yr Fuel Oil (including recycled oil) - Mgal/yr Lime Mud - ton/yr Petrol Coke - ton/yr
i. #4 Dissolver	Black Liquor - ton/yr
j. #5 Dissolver	Black Liquor - ton/yr
k. #1 Slaker	Lime - ton/yr
l. #2 Slaker	Lime - ton/yr
m. #3 Slaker	Lime - ton/yr
n. Pulp Produced	Pulp - ADT/yr
o. Linerboard Produced	Linerboard - ADT/yr
p. OCC Waste Burned	OCC Waste - ton/yr
q. #1 Slicer	Chips Sliced - ton/yr
r. #2 Slicer	Chips Sliced - ton/yr
s. #3 Slicer	Chips Sliced - ton/yr
t. #4 Slicer	Chips Sliced - ton/yr
u. Sawdust Screen	Sawdust Screened - ton/yr
v. #3 Paper Machine	Air-dried paper (including OCC plant input) - ton/yr

w. Hours of operation for the mill and each source if different from the mill operation time.

x. Fugitive dust information:

i. Tons of chips received for the year

ii. Tons of sawdust received for the year

iii. Tons of hog fuel received for the year

iv. Tons of fines sent to hog fuel from chip screen

v. Tons of fines sent to hog fuel from sawdust screen

vi. Tons of fines sent to storage bin from chip screen

vii. Tons of fines sent to storage bin from sawdust screen

viii. Tons of screened chips to Kamyr pile

ix. Tons of screened chips to batch pile

xi. Tons of ADS rejected to hog fuel pile

xii. Tons of screened sawdust overs to chip pile (as determined by weightometer on the sawdust overs belt).

2. Smurfit-Stone shall notify the Department of any construction or improvement project conducted pursuant to ARM 17.8.745, that would include a change of control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit. The notice must be submitted to the Department, in writing, 10 days prior to start up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(1)(d) (ARM 17.8.745).

3. All records compiled in accordance with this permit must be maintained by Smurfit-Stone as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.749).

B. Monthly Reporting Requirements

1. General Requirements

Stack tests performed by employees of the Missoula Mill shall be submitted with the monthly reports.

Montana Air Quality Permit (MAQP) Analysis
Smurfit-Stone Container Enterprises Inc.
MAQP #2589-15

I. Introduction/Process Description

A. Process Description

Smurfit-Stone Container Enterprises Inc. (Smurfit-Stone) operates a kraft pulp and liner mill in Section 24, Township 14 North, Range 21 West in Missoula County. This facility produces linerboard and other paper products by converting wood chips into pulp and then into paper. Smurfit-Stone uses a typical kraft recovery plant in which the cooking salts are recovered from the digestion process and reused. Smurfit-Stone uses several batch digesters and two continuous digesters to separate the wood fiber from the wood matrix. Digestion gases are controlled with a condenser and all noncondensible gases are incinerated in the lime kilns. The black liquor recovered from this process is used as a fuel in the recovery furnaces and the cooking salts are recovered to be used again. The recaust portion of the plant uses several lime kilns to convert calcium carbonate to calcium oxide, which is then used in converting green liquor from the recovery furnaces into the white cooking liquor. This is then reused to start the digestion process over again. The plant has two recovery boilers, four lime kilns, and three paper machines with all of the peripheral equipment required by the kraft process. The Fiber Optimization and Raw Material Management Transfer System (FORMM) at the facility allows Smurfit-Stone to more efficiently use the raw materials available by screening the materials more thoroughly. This system also provides for a more efficient use of chips and sawdust delivered to the plant.

B. Facility History

Smurfit-Stone is located approximately 10 miles northwest of Missoula. The plant underwent a major expansion during the mid-1970s, which added several New Source Performance Standards (NSPS) units. The basic plant capacity was designed for about 1850 tons per day of air-dried pulp. An air quality permit covered individual units at that time. In 1987, the permit was revised to allow Stone Container Corporation (Stone) to burn petroleum coke in all four lime kilns. In 1989, the permit was revised again to allow Stone to install and operate a recycled cardboard facility at the plant. This revision increased the capacity of the plant by approximately 400 air-dried tons per day.

On July 1, 1987, the Environmental Protection Agency (EPA) promulgated new ambient air quality standards for particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}). The annual standard is 50 micrograms per cubic meter and the 24-hour standard is 150 micrograms per cubic meter. These standards were adopted by the Montana Board of Health and Environmental Sciences on April 15, 1988.

Due to violations of these standards, Missoula was designated as a PM_{10} nonattainment area. As a result of this designation, the Montana Department of Health and Environmental Sciences (Department, now the Department of Environmental Quality) and the Missoula County Air Pollution Control Agency were required to develop a plan to control these emissions and bring the area into compliance with the federal and state ambient air quality standards.

The mill's recovery boilers were identified as significant contributors to this area through the identification of contributing emission sources. **Montana Air Quality Permit (MAQP) #2589-M** was a modification to add general fugitive dust control measures to this facility and to correct emission limitations for the #5 Recovery Boiler and the #4 Lime Kiln to agree with NSPS limits. These corrections decreased the allowable emissions enough to satisfy the State Implementation Plan (SIP) control plan for the area.

Stone requested an alteration to their permit to allow for the installation of a new FORMM System. This permit allowed the construction of the new screening room and the addition of the needed fugitive sources to allow Stone to better use the raw materials available and was given **MAQP #2589-02**.

In August of 1992, the EPA submitted comments on the Missoula SIP concerning a completeness determination and requesting additional information. In response to EPA's concern about the correlation between opacity and mass emissions, the Air Quality Division modified Stone's permit to clarify the language in the permit. The Air Quality Division also addressed the opacity requirements for the equipment at the mill and the opacity monitor range for the #5 Recovery Boiler. This permit was given **MAQP #2589-03**.

In April 1994, Stone applied for **MAQP #2589-04**, which allowed for change to be made in the existing FORMM system. The FORMM transfers the fines from the chip screens and the fines from the sawdust screens to the hog fuel pile. This alteration allowed Stone to transfer material from the FORMM, via an enclosed belt conveyor, to an enclosed storage bin, rather than to the hog fuel pile. This material could then be transferred to trucks for distribution off site. To accomplish this, construction of a storage bin, a storage bin unloading system, and an enclosed belt conveying system was needed. This proposed system and the existing system cannot be physically operated at the same time, but rather can be operated interchangeably. This alteration resulted in a net decrease in total particulate emissions of 44.09 tons per year (tpy) and a net decrease in PM_{10} emissions of 15.89 tpy.

In addition to the change in the FORMM system, the permit also reflected the fact that in June 1992 Stone replaced the existing #2 Lime Slaker with a larger lime slaker. The new #2 Lime Slaker has a maximum capacity of 550 gallons per minute (gpm) of green liquor and is controlled by a natural draft wet scrubber. The new #2 Lime Slaker has the same permit limits as the previous slaker, because the emissions would not increase since the vapor velocity in the new slaker is lower than the vapor velocity of the old slaker.

On March 24, 1995, Stone applied for MAQP #2589-05, to allow the mill to utilize dewatered sludge from the sludge dewatering facility as fuel for the existing waste fuel and hog fuel boilers at the facility. Both boilers have an alkaline scrubber for control; therefore, this change in fuel would result in a maximum actual emission increase of 17.5 tpy of sulfur dioxide (SO_2). Stone still had to comply with the existing facility-wide SO_2 limit of 5000 lb/day. There was no increase in emissions of oxides of nitrogen (NO_x), total suspended particulate (TSP), PM_{10}, carbon monoxide (CO), or volatile organic compounds (VOCs) as a result of this change in fuel. A more detailed description of the change is included in the analysis for MAQP #2589-05. **MAQP #2589-05** replaced MAQP #2589-04.

MAQP Alteration #2589-06 was issued on February 25, 1996, and allowed Stone to replace the existing third press in the #3 Paper Machine with a shoe press. The change increased the quality of the linerboard produced and allowed the machine to be operated

at a higher production rate, from the current capacity of 59.6 tons of air-dried pulp per hour to 64.8 tons air-dried pulp per hour. The permit alteration also limited the yearly production of the #3 Paper Machine. Minor wording changes were also made to the permit at the mill's request. A more detailed description of the change is included in the analysis for MAQP #2589-06.

On June 7, 1996, Stone was issued MAQP #2589-07 for modifications to the existing scrubbing system on the #4 Smelt Dissolver. A venturi scrubber was added prior to the current scrubber and before the internal design and packing of the current scrubber was modified. The allowable emissions from the dissolver did not change as a result of this action. However, because the new system operates with an increased efficiency, actual particulate emissions from the dissolver were expected to decrease by 9 tpy. **MAQP #2589-07** replaced MAQP #2589-06.

On December 14, 1999, Stone applied for MAQP #2589-08, an alteration to MAQP #2589-07. Stone requested the alteration to include conditions for a thermal oxidizer to be installed as part of the Maximum Achievable Control Technology (MACT) I Cluster Rule requirements. Stone is subject to 40 Code of Federal Regulations (CFR) 63, Subpart S (MACT I), for the pulp and paper industry. In order to comply with the regulations, Stone proposed to install and operate a steam stripper and a thermal oxidizer. The Department approved the project as a pollution control project (PCP) under the Prevention of Significant Deterioration (PSD) regulations. The Department reviewed the project and the 1994 EPA memo entitled *Pollution Control Projects and New Source Review (NSR) Applicability*, and determined that the project will be environmentally beneficial.

However, the potential emissions for NO_x were determined to exceed the significance levels under the PSD regulations. Stone conducted modeling to determine the impacts of the NO_x emissions. The Department reviewed the modeling results, along with previous modeling completed by Stone, and determined that the thermal oxidizer would not cause or contribute to a violation of the national ambient air quality standards, PSD increment, or adversely affect visibility or other air quality related values.

The project also included other activities such as construction of the LVHC-non-condensible gas (NCG) system and re-configuration of the batch digestor vent. The permit format and the rule references were updated, as well as updates to conditions in which the Administrative Rule of Montana (ARM) 17.8.321 (Kraft Pulp Mills) applies. **MAQP #2589-08** replaced MAQP #2589-07.

Stone submitted a complete permit application on December 27, 2000, for the installation and operation of seven temporary, diesel-fired generators at their facility. This application was assigned MAQP #2589-09. Stone asserted that the generators were necessary because the high cost of electricity had significantly impacted operations at Stone, forcing a reduction in manufacturing at the Frenchtown facility. The operation of the generators would not occur beyond 2 years and was not expected to last for an extended period of time, but rather only for the length of time necessary for Stone to acquire a permanent, more economical supply of power. Integral to the diesel generators are the electronic engine controls (EEC) and intake air cooling (IAC) for NO_x emission control.

The temporary generators would only be used when commercial power is too expensive and is impacting mill operations; therefore, the amount of emissions expected during the actual operation of these generators was not anticipated to be major. In addition, the installation of these generators qualifies as a "temporary source" under the PSD

permitting program because the permit would limit the operation of these generators to a time period of less than 2 years. As a result, Stone would not need to comply with ARM 17.8.804, 17.8.820, 17.8.822, and 17.8.824. Even though the portable generators were considered temporary, the Department required compliance with Best Available Control Technology (BACT) and public notice requirements; therefore, compliance with ARM 17.8.819 and 17.8.826 would be ensured. **MAQP #2589-09** replaced MAQP #2589-08.

MAQP #2589-10 was issued on September 9, 2003, for the proposed installation of a replacement chip-meter and low-pressure feeder for Stone's existing Chip Kamyr digester (Kamyr). Stone proposed changes to the chip bin to allow installation of the replacement chip-meter. The replacement of the Kamyr's chip-meter would allow that digester to increase its production. Stone intended to increase production of the Kamyr, while curtailing the other digesters. If such an increase in production were to be evaluated with respect to the full potential utilization of the other digesters with the Kamyr, a PSD review may be required. To ensure that the Kamyr project would not increase Stone's potential emissions above the PSD significance level, Stone proposed a mill-wide limitation of 535,000 oven dry tons (ODT) of wood pulp production per year. The Kamyr, when compared with the combined production of the digester systems, produces the highest pulp quality at the highest pulp yield and uses the least steam per ton of pulp, resulting in less black liquor solids generation per ton of pulp. Therefore, actual emissions resulting from the implementation of this project were expected to decrease.

Potential emissions for the 535,000 ODT of wood pulp production per year were calculated using emission factors for the Kamyr digester alone, as this represents the most likely scenario. However, Stone retains the ability to operate the other digesters as they are currently permitted, either alone, or in combination with the Kamyr. **MAQP #2589-10** replaced MAQP #2589-09.

Stone submitted a request for permit amendment on December 12, 2002, to make the MAQP #2589-10 consistent with the Title V Operating Permit (#OP2589-01). In addition, Stone submitted de minimis requests on April 21, 2003; August 8, 2003; and September 10, 2003, which will be incorporated into the MAQP. A more detailed description of the change is included in the analysis for MAQP #2589-10. **MAQP #2589-11** replaced MAQP #2589-10.

Smurfit-Stone submitted a request for a permit amendment on October 1, 2004, of MAQP #2589-11. Smurfit-Stone requested a name change from Stone to Smurfit-Stone. **MAQP #2589-12** replaced MAQP #2589-11.

On October 3, 2005, the Department received an application from Smurfit-Stone for a significant modification to #OP2589-03 as well as a de minimis notification. Smurfit-Stone must comply with the high volume, low concentration (HVLC) non-condensable gas (NCG) requirements in 40 CFR 63, Subpart S, National Emissions Standards for Hazardous Air Pollutants for the Pulp and Paper Industry (commonly referred to as MACT I, Phase II). MACT I, Phase II requires collection and treatment of emissions from specified HVLC-NCG sources. The compliance date for the HVLC-NCG (MACT I, Phase II) requirements was April 17, 2006. The significant modification to #OP2589-03 is to remove the requirement to vent the brown stock washer emissions through wet scrubbers as well as to include the HVLC-NCG collection and treatment requirements.

Smurfit-Stone notified the Department to remove the requirement to operate the brown stock washer scrubbers from MAQP #2589-12. The purpose of Smurfit-Stone's

requirement to operate wet scrubbers on the washer exhausts is the control of particulate emissions. For the following reasons, Smurfit-Stone believes this requirement to be unnecessary after installation, as part of the HVLC-NCG collection system, of the new low-infiltration washer hoods, whether the HVLC-NCG collection system is operating or not. The HVLC-NCG system is specifically designed for the collection and treatment of gaseous Hazardous Air Pollutants (HAPs). The introduction of significant amounts of particulate (fiber) into the system would result in plugging and failure of the HVLC cooler and entrainment separators, as well as fiber buildup on the HVLC Booster Fan, HVLC DFO fan and doctor blade fans resulting in fan imbalance and potential failure.

A significant portion of the MACT I, Phase II project is the installation of new low-infiltration washer hoods on the top and base stock washers. The purpose of the new hoods is to reduce air infiltration into the hoods to minimize the volume of the HVLC-NCGs that needs to be transported and treated. Because particulate present in the HVLC system would result in severe operational problems, significant design features have been incorporated into the new hoods to prevent the introduction of particulate into the HVLC-NCG collection system. These design features include:

- Minimized air leakage into the hoods. Because the hoods are designed to minimize air leakage into the hood, the volume of air that must be evacuated from the hood is much less than in the current design. This lower airflow into, and subsequently out of, the hood reduces turbulence within the hood and minimized the entrainment of fiber that may have become airborne as a result of the operation of the air doctors, which pneumatically remove the fiber sheet from the drum.

- Locating the air outlet at the top of the washer hood, approximately 6 feet above the washer drum. This allows any large wet fibers that may have become airborne as a result of the operation of the air doctors time to drop out prior to entering the outlet. In the current hoods, the air outlet from the hood is located very near the drum and air doctors resulting in the potential for fiber entrainment.

- In the new hood design the air outlet intake is through a perforated plenum that runs the entire length of the top of washer hood. This perforated plenum design – consisting of 4-inch holes spaced every foot - results in very low capture velocities to prevent entrainment of the fiber particles. The current hood design does not have a plenum, but a single round suction inlet resulting in significantly higher capture velocities.

- The outlet of the hood exhaust plenum incorporates a vertical "dam" consisting of about a 2-inch lip, which should remove any entrained moisture and fiber that may enter the plenum.

- Though Smurfit-Stone does not anticipate any fiber leaving the washer hood, the outlet of the hood exhaust plenum raises about 10 feet in elevation to the HVLC header exiting the Brown Stock Washer building. This elevation increase will further remove any entrained moisture and fiber (by gravity) that may enter the HVLC piping.

As discussed above, it is critical to the operation and maintenance of the HVLC system that fiber not enter the HVLC piping due to resulting fouling of the air doctor fan system, gas cooler, entrainment separators, and HVLC fans.

Because of the above mentioned design features of the new low-infiltration hoods, and the large, wet particle configuration of any airborne fiber that would be generated by the operation of the air doctors, the particulate emissions from the washer hoods entering the

HVLC system, although not quantified, is expected to be insignificant. This would be the case both during operation of the HVLC-NCG collection system and during malfunctions of the HVLC-NCG collections system when the emissions from the washers are being vented to atmosphere. Therefore, Smurfit-Stone believes, once the new hoods are installed, the requirement to operate wet scrubbers to control particulate emissions from the washers should be removed.

This permit action incorporates Smurfit-Stone's request to remove the requirement to operate wet scrubbers to control particulate emissions from the washers in the MAQP according to the provisions of ARM 17.8.745. **MAQP #2589-13** replaced MAQP #2589-12.

On November 14, 2008, the Department received a complete application from Smurfit-Stone to modify MAQP #2589-13. In this application, Smurfit-Stone requested to install a 300-ton capacity soda ash storage silo with an associated pneumatic truck unloading station and mixing equipment to mix dry soda ash into a solution suitable for addition to green liquor.

To replace sodium losses in the pulping process, the mill currently uses caustic in liquid form as a make-up chemical. Caustic is becoming increasingly more expensive and difficult to acquire. In response to the increasing costs and decreasing availability of caustic, the mill intends to install a soda ash system for use as a make-up chemical.

In addition, Smurfit-Stone requested several administrative amendment changes to its Title V Operating permit in its renewal application received by the Department on June 12, 2006. The requested changes also necessitated administrative changes to Smurfit-Stone's MAQP. These amendments included the removal of several units that are no longer in service: the No. 3 Recovery Boiler, No. 3 Smelt Dissolving Tank, and the pin chip pile and digester cyclone and other various clarifications. Also, on September 30, 2008, the Department approved Smurfit-Stone's request to discontinue ambient monitoring of PM_{10}. The Department has updated the permit to reflect these changes. **MAQP #2589-14** replaced MAQP #2589-13.

C. Current Permit Action

On November 19, 2009, the Department received an administrative amendment request letter from Smurfit-Stone to modify MAQP #2589-14. In this letter, Smurfit-Stone requested that the Department update the MAQP to reflect changes in some emissions testing schedules and compliance demonstration practices that the Department and Smurfit-Stone agreed to and implemented during the most recent renewal of their Title V Operating Permit which became final on August 20, 2009. The Technical Review Document associated with Operating Permit (OP) #OP2589-06 provides a summary of the dialogue between Smurfit-Stone and the Department regarding the changes in the Summary of Public Comments. These changes are as follows:

1. The sulfur content analysis of the dewatered sludge used as fuel for the Multi-fuel boiler was changed from quarterly testing to annual testing.

2. The frequency of TSP and PM_{10} source testing requirements for #1, #2, #3, and #4 Lime Kilns was changed from annual testing to once every two years.

3. The frequency of TSP and PM_{10} source testing requirements for the #3 Lime Slaker was changed from annual testing to as required by the Department.

Montana Dioxin Background Investigation Report

Montana Department of Environmental Quality
Remediation Division
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April 2011

ABSTRACT

In 2008, the Montana Department of Environmental Quality completed an effort to collect surface soil samples for dioxins and dibenzofurans statewide to quantify background concentrations of these compounds in surface soils in all regions of the state. Surface soils were collected using a stratified approach based on land use and were analyzed for polychlorinated dioxins and dibenzofurans. In all, DEQ collected 223 surface soil samples from locations that were not indicated to be impacted by point sources of dioxins. The data were then evaluated to establish background dioxin concentrations in Montana as a whole and in the stratified land use populations. The results of the investigation indicate Montana surface soils from unimpacted areas have dioxin concentrations below the Environmental Protection Agency's Regional Screening Level of 4.5 nanograms per kilogram (ng/kg). Montana's statewide background dioxin concentration was determined to be 3.7 ng/kg.

Appendix B
Summary Statistics

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Table B-1. Summary statistics for statewide dioxin and dibenzofuran data (all urban + all rural).

Dioxin	N	Number of Detects	Percentage of Detects (%)	Minimum Detected Value (ng/kg)	Maximum Detected Value (ng/kg)	Detection Limit (ng/kg)	Mean (ng/kg)	Standard Deviation (ng/kg)	Coefficient of Variation (%)	Upper Confidence Limit (ng/kg)	Upper Tolerance Limit (ng/kg)
2,3,7,8-TCDF	122	25	20.49%	0.18	0.97	0.033-0.59	NA	NA	NA	0.97	0.97
2,3,7,8-TCDD	123	18	14.63%	0.1	1.6	0.045-0.62	NA	NA	NA	1.6	1.6
1,2,3,7,8-PeCDF	100[a]	13	13.00%	0.067	0.5	0.053-1.0	0.103	0.0969	94.08%	0.128	0.25
2,3,4,7,8-PeCDF	123	39	31.71%	0.093	5.2	0.036-1.0	0.428	0.735	171.73%	0.541	1.528
1,2,3,7,8-PeCDD	123	37	30.08%	0.049	2.1	0.057-1.1	0.2	0.32	160.00%	0.251	0.68
1,2,3,4,7,8-HxCDF	122	40	32.79%	0.081	3.7	0.041-1.0	0.355	0.564	158.87%	0.442	1.2
1,2,3,6,7,8-HxCDF	116[b]	45	38.79%	0.07	2.5	0.042-1.0	0.367	0.484	131.88%	0.446	1.096
2,3,4,6,7,8-HxCDF	123	45	36.59%	0.076	2.8	0.038-1.0	0.394	0.562	142.64%	0.481	1.236
1,2,3,7,8,9-HxCDF	123	24	19.51%	0.061	0.81	0.035-1.0	NA	NA	NA	0.81	0.81
1,2,3,4,7,8-HxCDD	123	47	38.21%	0.068	4.5	0.050-1.0	0.33	0.577	174.85%	0.422	1.194
1,2,3,6,7,8-HxCDD	123	62	50.41%	0.06	9.5	0.075-1.0	0.926	1.611	173.97%	1.567	3.339
1,2,3,7,8,9-HxCDD	123	55	44.72%	0.063	8.1	0.042-1.0	0.616	1.11	180.19%	0.785	2.279
1,2,3,4,6,7,8-HpCDF	116[c]	81	69.83%	0.11	78	0.19-1.0	4.609	9.352	202.91%	6.197	18.68
1,2,3,4,6,7,8-HpCDF (2 Outliers Removed)	114[c]	79	69.30%	0.11	26	0.19-1.0	3.62	5.211	143.95%	4.534	11.47
1,2,3,4,7,8,9-HpCDF	123	30	24.39%	0.1	13	0.061-1.0	NA	NA	NA	13	13
1,2,3,4,7,8,9-HpCDF (Outlier Removed)	122	29	23.77%	0.1	3.9	0.061-1.0	NA	NA	NA	3.9	3.9
1,2,3,4,6,7,8-HpCDD	123	106	86.18%	0.94	280	0.40-1.3	22.69	46.92	206.79%	41.22	92.98
OCDF	123	80	65.04%	0.33	390	0.27-13.0	13.74	41.01	298.47%	29.97	75.18
OCDF (Outlier Removed)	122	79	64.75%	0.33	160	0.27-13.0	10.66	22.93	215.10%	19.77	45.04
OCDD	123	108	87.80%	2.4	4200	1.4-250	195.1	498.2	255.36%	476.9	941.4
OCDD (Outlier Removed)	122	107	87.70%	2.4	2500	1.4-250	162.3	343	211.34%	357.2	676.5
TEQ	123	NA	NA	0.112	12.69	NA	1.386	1.853	133.69%	2.43	3.719

a. Fifteen samples were R-flagged and not included in the analysis.
b. One sample was R-flagged and not included in the analysis.
c. Three samples were R-flagged and not included in the analysis.

Table B-2. Summary statistics for all urban dioxin/dibenzofuran data.

Dioxin	N	Number of Detects	Percentage of Detects (%)	Minimum Detected Value (ng/kg)	Maximum Detected Value (ng/kg)	Detection Limit (ng/kg)	Mean (ng/kg)	Standard Deviation (ng/kg)	Coefficient of Variation (%)	Upper Confidence Limit (ng/kg)	Upper Tolerance Limit (ng/kg)
2,3,7,8-TCDF	61	21	34.43%	0.18	0.97	0.033-0.55	0.279	0.187	0.6702509	0.32	0.579
2,3,7,8-TCDD	62	14	22.58%	0.1	1.6	0.045-0.31	0.198	0.285	1.43939394	0.261	0.655
1,2,3,7,8-PeCDF	43[a]	8	18.60%	0.097	0.5	0.065-1.0	NA	NA	NA	0.5	0.5
2,3,4,7,8-PeCDF	62	34	54.84%	0.19	5.2	0.045-1.0	0.74	0.916	123.78%	0.938	2.204
1,2,3,7,8-PeCDD	62	28	45.16%	0.076	2.1	0.057-1.0	0.288	0.399	138.54%	0.375	0.925
1,2,3,4,7,8-HxCDF	61	33	54.10%	0.1	3.7	0.055-1.0	0.507	0.6	118.34%	0.639	1.468
1,2,3,4,7,8-HxCDF (Outlier Removed)	60	32	53.33%	0.1	1.9	0.055-1.0	0.454	0.44	96.92%	0.552	1.16
1,2,3,6,7,8-HxCDF	55[b]	37	67.27%	0.094	2.5	0.084-1.0	0.586	0.568	96.93%	0.726	1.507
2,3,4,6,7,8-HxCDF	62	39	62.90%	0.13	2.8	0.057-1.0	0.649	0.672	1.03543914	0.8	1.722
1,2,3,7,8,9-HxCDF	62	24	38.71%	0.061	0.81	0.055-1.0	0.184	0.182	98.91%	0.226	0.474
1,2,3,4,7,8-HxCDD	62	37	59.68%	0.078	4.5	0.062-1.0	0.506	0.749	148.02%	0.668	1.703
1,2,3,6,7,8-HxCDD	62	46	74.19%	0.073	9.5	0.083-0.99	1.559	2.043	131.05%	2.062	4.824
1,2,3,7,8,9-HxCDD	62	44	70.97%	0.084	8.1	0.085-0.99	1.012	1.422	140.51%	1.387	3.284
1,2,3,4,6,7,8-HpCDF	57[c]	50	87.72%	0.4	78	0.045-0.99	7.564	11.97	158.25%	14.54	26.88
1,2,3,4,6,7,8-HpCDF (Outlier Removed)	55[c]	48	87.27%	0.4	26	0.045-0.99	5.621	5.508	0.97989682	6.933	14.55
1,2,3,4,7,8,9-HpCDF	62	25	40.32%	0.12	13	0.078-1.0	0.637	1.698	2.66562009	1.169	3.35
1,2,3,4,7,8,9-HpCDF (Outlier Removed)	61	24	39.34%	0.12	3.5	0.078-1.0	0.434	0.618	142.40%	0.571	1.424
1,2,3,4,6,7,8-HpCDD	62	61	98.39%	0.94	280	1.1	40	60.87	152.18%	73.98	137.3
OCDF	62	48	77.42%	1.7	390	0.78-13.0	21.85	53.41	244.44%	51.73	107.2
OCDF (Outlier Removed)	61	47	77.05%	1.7	160	0.78-13.0	15.81	25.33	160.22%	21.99	56.36
OCDF (3 Outliers Removed)	59	45	76.27%	1.7	54	0.78-13.0	11.77	12	101.95%	14.56	31.06
OCDD	62	56	90.32%	5.2	4200	9.9-250	352.7	662.7	187.89%	722.9	1412
OCDD (Outlier Removed)	61	55	90.16%	5.2	2500	9.9-250	289.7	446.9	1.54263031	541.4	1005
TEQ	62	62	100.00%	0.124	12.69	NA	1.972	2.41	1.22210953	3.884	7.456

a. Fifteen samples were R-flagged and not included in the analysis.
b. One sample was R-flagged and not included in the analysis.
c. Two samples were R-flagged and not included in the analysis.

Table B-3. Summary statistics for urban-commercial dioxin/dibenzofuran data.

Dioxin	N	Number of Detects	Percentage of Detects (%)	Minimum Detected Value (ng/kg)	Maximum Detected Value (ng/kg)	Detection Limit (ng/kg)	Mean (ng/kg)	Standard Deviation (ng/kg)	Coefficient of Variation (%)	Upper Confidence Limit (ng/kg)	Upper Tolerance Limit (ng/kg)
2,3,7,8-TCDF	18	8	44.44%	0.27	0.95	0.078-0.55	0.352	0.165	0.46875	0.425	0.678
2,3,7,8-TCDF (Outlier Removed)	17	7	41.18%	0.27	0.55	0.078-0.55	0.317	0.0814	0.25678233	0.355	0.48
2,3,7,8-TCDD	19	4	21.05%	0.15	0.52	0.047-0.28	NA	NA	NA	0.52	0.52
1,2,3,7,8-PeCDF	12[a]	1	8.33%	0.35	0.35	0.092-1.0	NA	NA	NA	0.35	0.35
2,3,4,7,8-PeCDF	19	11	57.89%	0.35	3.6	0.069-1.0	0.875	0.818	93.49%	1.218	2.47
1,2,3,7,8-PeCDD	19	8	42.11%	0.13	1	0.057-1.0	0.272	0.222	81.62%	0.402	0.704
1,2,3,4,7,8-HxCDF	19	13	68.42%	0.1	3.7	0.071-1.0	0.726	0.824	113.50%	1.085	2.332
1,2,3,4,7,8-HxCDF (Outlier Removed)	18	12	66.67%	0.1	1.6	0.071-1.0	0.561	0.445	79.32%	0.76	1.44
1,2,3,6,7,8-HxCDF	16	12	75.00%	0.12	2.1	0.13-1.0	0.673	0.546	0.81129272	0.931	1.783
2,3,4,6,7,8-HxCDF	19	14	73.68%	0.22	2.6	0.094-1.0	0.767	0.7	91.26%	1.036	2.131
1,2,3,7,8,9-HxCDF	19	6	31.58%	0.13	0.51	0.055-1.0	0.218	0.135	61.93%	0.51	0.51
1,2,3,4,7,8-HxCDD	19	14	73.68%	0.086	1.3	0.075-1.0	0.462	0.297	64.29%	0.595	1.042
1,2,3,6,7,8-HxCDD	19	15	78.95%	0.27	7.9	0.17-0.98	1.709	1.754	102.63%	2.649	5.128
1,2,3,6,7,8-HxCDD (Outlier Removed)	18	14	77.78%	0.27	4.1	0.17-0.98	1.365	1	73.26%	1.793	3.339
1,2,3,7,8,9-HxCDD	19	15	78.95%	0.21	2.7	0-11-0.98	0.98	0.645	0.65816327	1.25	2.237
1,2,3,4,6,7,8-HpCDF	17[b]	15	88.24%	1	78	0.73-0.98	10.31	17.51	1.69835112	29.46	45.35
1,2,3,4,6,7,8-HpCDF (Outlier Removed)	16[b]	14	87.50%	1	16	0.73-0.98	6.075	4.616	75.98%	8.174	15.46
1,2,3,4,7,8,9-HpCDF	19	8	42.11%	0.26	13	0.079-1.0	1.145	2.821	246.38%	2.673	6.643
1,2,3,4,7,8,9-HpCDF (Outlier Removed)	18	7	38.89%	0.26	1.8	0.079-1.0	0.486	0.398	81.89%	0.669	1.272
1,2,3,4,7,8,9-HpCDF (2 Outliers Removed)	17	6	35.29%	0.26	0.97	0.079-1.0	0.409	0.245	59.90%	0.535	0.9
1,2,3,4,6,7,8-HpCDD	19	19	100.00%	2	250	NA	42.18	55.78	132.24%	67.45	250
1,2,3,4,6,7,8-HpCDD (Outlier Removed)	18	18	100.00%	2	94	NA	30.63	24.75	80.80%	40.78	94
OCDF	19	16	84.21%	5.3	390	0.98-3.4	35.98	84.42	2.3463035	160.9	200.5
OCDF (Outlier Removed)	18	15	83.33%	5.3	54	0.98-3.4	16.32	13.18	0.80759804	22.36	42.34
OCDD	19	17	89.47%	26	4200	15-39	466.6	905.4	1.94042006	1804	2231
OCDD (Outlier Removed)	18	16	88.89%	26	950	15-39	259.2	219	0.844907	359.1	691.5
OCDD (2 Outliers Removed)	17	15	88.24%	26	480	15-39	218.5	145.1	0.664073	282.1	509.1
TEQ	19	19	100.00%	0.14	7.86	NA	1.955	1.759	0.899744	2.839	7.86
TEQ (Outlier Removed)	18	18	100.00%	0.14	3.818	NA	1.627	1.054	0.647818	2.059	3.818

a. Six samples were R-flagged and not included in the analysis.
b. One sample was R-flagged and not included in the analysis.

Table B-4. Summary statistics for urban-industrial dioxin/dibenzofuran data.

Dioxin	N	Number of Detects	Percentage of Detects (%)	Minimum Detected Value (ng/Kg)	Maximum Detected Value (ng/Kg)	Detection Limit (ng/Kg)	Mean (ng/Kg)	Standard Deviation (ng/Kg)	Coefficient of Variation (%)	Upper Confidence Limit (ng/Kg)	Upper Tolerance Limit (ng/Kg)
2,3,7,8-TCDF	20	5	25.00%	0.27	0.91	0.05-0.4	NA	NA	NA	0.91	0.91
2,3,7,8-TCDF (Outlier Removed)	19	4	21.05%	0.27	0.5	0.05-0.4	NA	NA	NA	0.5	0.5
2,3,7,8-TCDD	20	5	25.00%	0.1	1.3	0.045-0.21	NA	NA	NA	1.3	1.3
2,3,7,8-TCDD (2 Outliers Removed)	18	3	16.67%	0.1	0.2	0.045-0.21	NA	NA	NA	0.2	0.2
1,2,3,7,8-PeCDF	14	3	21.43%	0.26	0.43	0.065-0.17	NA	NA	NA	0.43	0.43
2,3,4,7,8-PeCDF	20	13	65.00%	0.19	3.2	0.078-1.0	0.681	0.746	109.54%	0.98	2.118
2,3,4,7,8-PeCDF (2 Outliers Removed)	18	11	61.11%	0.19	1.1	0.078-1.0	0.462	0.327	70.78%	0.606	1.107
1,2,3,7,8-PeCDD	20	9	45.00%	0.13	1.9	0.07-1.0	0.351	0.448	127.64%	0.536	1.215
1,2,3,4,7,8-HxCDF	20	11	55.00%	0.12	1.9	0.056-0.36	0.506	0.509	100.59%	0.773	1.487
1,2,3,6,7,8-HxCDF	18	13	72.22%	0.12	2.5	0.084-1.0	0.631	0.655	103.80%	0.906	1.924
1,2,3,6,7,8-HxCDF (2 Outliers Removed)	16	11	68.75%	0.12	1	0.084-1.0	0.428	0.326	76.17%	0.583	1.091
2,3,4,6,7,8-HxCDF	20	14	70.00%	0.13	2.8	0.057-1.0	0.69	0.753	109.13%	0.999	2.14
2,3,4,6,7,8-HxCDF (2 Outliers Removed)	18	12	66.67%	0.13	1.3	0.057-1.0	0.462	0.325	70.35%	0.617	1.103
1,2,3,7,8,9-HxCDF	20	8	40.00%	0.16	0.61	0.073-1.0	0.227	0.115	50.66%	0.313	0.448
1,2,3,4,7,8-HxCDD	20	12	60.00%	0.1	4.5	0.088-0.64	0.7	1.039	148.43%	1.176	2.7
1,2,3,4,7,8-HxCDD (Outlier Removed)	19	11	57.89%	0.1	2.3	0.088-0.64	0.5	0.579	115.80%	0.743	1.629
1,2,3,4,7,8-HxCDD (2 Outliers Removed)	18	10	55.56%	0.1	1.4	0.088-0.64	0.4	0.405	101.25%	0.577	1.2
1,2,3,6,7,8-HxCDD	20	17	85.00%	0.32	9.5	0.14-0.31	2.066	2.417	116.99%	4.495	6.722
1,2,3,7,8,9-HxCDD	20	16	80.00%	0.17	8.1	0.085-0.48	1.385	1.834	132.42%	2.206	4.917
1,2,3,7,8,9-HxCDD (Outlier Removed)	19	15	78.95%	0.17	4.2	0.085-0.48	1.032	1.021	98.93%	1.519	3.021
1,2,3,4,6,7,8-HpCDF	19	17	89.47%	1.3	44	0.45-0.73	8.832	10.59	119.90%	19.75	29.47
1,2,3,4,6,7,8-HpCDF (Outlier Removed)	18	16	88.89%	1.3	26	0.45-0.73	6.878	6.773	98.47%	9.678	20.25
1,2,3,4,7,8,9-HpCDF	20	8	40.00%	0.22	3.5	0.13-1.0	0.6	0.876	146.00%	0.963	2.287
1,2,3,4,7,8,9-HpCDF (2 Outliers Removed)	18	6	33.33%	0.22	0.97	0.13-1.0	0.317	0.188	59.31%	0.478	0.689
1,2,3,4,6,7,8-HpCDD	20	20	100.00%	2	280	NA	53.77	73.53	136.75%	89.74	280
1,2,3,4,6,7,8-HpCDD (3 Outliers Removed)	17	17	100.00%	2	110	NA	26.79	27.56	102.87%	41.57	110
OCDF	20	16	80.00%	3.8	160	1.2-13	24.23	38.95	160.75%	80.42	99.25
OCDF (2 Outliers Removed)	18	14	77.78%	3.8	43	1.2-13	11.92	10.08	84.56%	16.31	31.83
OCDD	20	18	90.00%	22	2500	24-250	449.9	645.4	143.45%	1097	1693
OCDD (3 Outliers Removed)	17	15	88.24%	22	650	24-250	205.8	186.3	90.52%	286.1	578.8
TEQ	20	20	100.00%	0.13	9.336	NA	2.18	2.427	111.33%	4.822	5.84

12/26/2007

BACKGROUND CONCENTRATIONS FOR INORGANICS IN SOIL

	Selected Elements (mg/kg)																		
Reference:	**Al**	**Sb**	**As***	**Ba**	**Be**	**Cd**	**Cr**	**Co**	**Cu**	**Fe**	**Pb**	**Mn**	**Hg**	**Ni**	**Se**	**Ag**	**Tl**	**V**	**Zn**
U.S. Mean Soil (Kabata-Pendlas & Pendlas 1984)	-	-	6.7	-	-	0.73	-	-	24	-	20	495	0.09	-	0.3	-	-	-	58
U.S. Mean Soil (Adriano 1986)	-	-	7.2	-	-	0.3	-	-	25	-	15	560	0.09	-	0.1 - 2	-	-	-	65
Mean Shale (Bowen 1979)	88,000	1.5	13	550	3	0.22	90	19	39	48,000	23	850	0.18	-	0.5	0.07	1.2	130	120
Western U.S. Soils Mean (Schacklette & Boerngen 1984)	58,000	0.47	5.5	580	0.68	-	41	7.1	21	21,000	17	380	0.05	15	0.23	-	-	70	55
Helena Valley Mean Soil (EPA 1987)	-	-	16.5	-	-	0.24	-	-	16.3	15,248	11.6	336	0.08	-	0.07	-	-	-	46.9
Missoula Lake Bed Sediments (Moore 1985)	-	-	-	-	-	0.2	-	-	25	-	34	406	-	-	-	-	-	-	105
Blackfoot River Sediments (Rice & Ray 1985)	-	-	4	-	-	<0.1	-	-	13	-	-	-	-	-	-	-	-	-	-
Clark Fork Study Site 14 Mean Soil (?)	-	-	16	-	-	0.76	-	-	29	19,270	15	514	0.08	-	<0.35	-	-	-	82

* DEQ has adopted an action level for arsenic in surface soil of 40 mg/kg based upon a statistical analysis of native Montana soil concentrations (April 2005).

DEPARTMENT OF
ENVIRONMENTAL QUALITY
Waste Management Division
Solid Waste Program
(406) 444-1430
FAX # (406) 444-1499

STATE OF MONTANA

OFFICE LOCATION: 2209 PHOENIX AVE. HELENA, MONTANA
MAILING ADDRESS: PO BOX 200901 HELENA, MT 59620-0901

September 21, 1995

Laura Kosmalski
Stone Container Corporation
Mullan Road
P.O. Box 4707
Missoula, Montana 59806-4707

SUBJECT: **Final Closure Plan**

Dear Laura:

Thank you for submitting the Closure Report requested on May 15, 1995. The Department has reviewed the Report, and together with the addendum dated September 12, 1995, is considered complete and acceptable. With this final report, the Department considers the three unlicensed landfill sites (Pond A, Pond 6, and sites F & C) to be closed. Post-closure care and maintenance will be necessary to ensure that the final cover installed on these sites is not damaged or compromised by erosion or other activities. The question raised concerning whether the old asbestos disposal area is required to be fenced, has been referred to the U.S. EPA for resolution (see enclosed letter).

Thank you very much for your efforts in resolving the issues of the disposal sites. If you have any questions, do not hesitate to contact me.

Sincerely,

James Wilbur
Solid Waste Program

Enclosure: Copy of A. Guthrie's letter

cc with encl:
Paul Willhite, Regional Manager, Environmental Services, Stone Container Corp., 1979 Lakeside Parkway, Suite 300, Tucker, Georgia 30084
Mr. Barry Damschen, Damschen & Associates, P.O. Box 4817, Helena, MT 59604
Alan English, R.S., City-County Health, 301 W Alder St., Missoula, MT 59802
Andrea Guthrie, Occupational Health, AQD, DEQ

Path: F:\cb5684\wp\Lou\Stone.dun
File: Missoula County \Stone Container Unlicensed Site #9088-Closure files

URS

URS OPERATING SERVICES, INC.
START 3 - REGION 8

MEMORANDUM

TO: **FILE**

FROM: Jeff Miller, Senior Environmental Officer (303) 291-8212

DATE: **February 20, 2013**

SUBJECT: **Methodology and source data used to create table of USGS provisional water-quality data (Part of Reference 66).**

The table of USGS provisional water quality data from sampling conducted on the Clark Fork River was created by the following method:

1. The USGS Clark Fork Water-Quality Monitoring website was accessed at: http://mt.water.usgs.gov/projects/clarkfork/sampling.html (see screen shot on pages 2-3 of this memo).
2. Near the bottom of the home page of the website above, the link to the ftp site (ftp://milltown.envirocon.com) was copied and pasted into a new Windows Explorer (not Internet Explorer) window.
3. When step 2 is performed, a list of folders appears (screen shot on page 4 of this memo).
4. The "usgs provisional lower clark fork monitoring data" folder was opened, revealing a list of subfolders and spreadsheet files (screen shot on page 5 of this memo).
5. Each of the folders and files containing the most recent available data (April-May 2009, all circled on the screen shot on page 5 of this memo) were opened (e.g. pages 6 and 7 of this memo).
6. Data from each spreadsheet was cut and pasted into a new spreadsheet, which forms the table found on pages 8 and 9 of this memo).

cc: File/ UOS

USGS
science for a changing world

Montana Water Science Center

CLARK FORK WATER-QUALITY MONITORING

SUPPLEMENTAL SAMPLING IN THE LOWER CLARK FORK BASIN

In 2006, the USGS began a program in cooperation with the USEPA to collect water-quality samples during high flow (March-June) at six sites in the lower Clark Fork basin (fig. 1) from the area near Milltown Reservoir to the confluence with the Flathead River (near Plains). The sampling continued in 2008 after the breaching of Milltown Dam to document the substantial expected erosion of the bottom sediments from the former reservoir area. Supplemental sampling will be conducted again during March-June 2009.

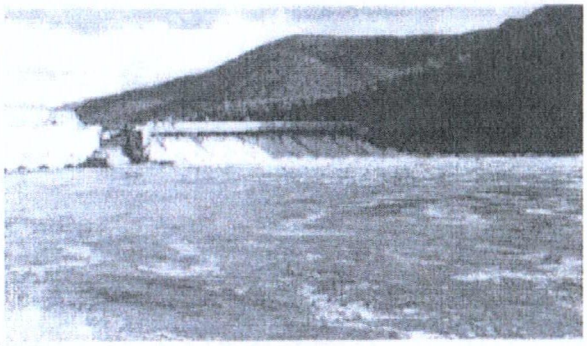
The purpose of the supplemental sampling is to measure trace-element loads transported past various points in the basin to determine the relative contribution from individual sources such as reservoir bottom sediments, tributary basins, and intervening reaches of channel between mainstem sampling sites. Two major rivers enter the lower Clark Fork in this approximately 120-mi reach: the Bitterroot and Flathead Rivers. The lower Clark Fork basin upstream from Plains drains an area of about 19,960 mi^2. The six sampling sites (listed below) are USGS streamflow-gaging stations. Sites 1-3, which bracket the area of Milltown Reservoir, also are part of the upper Clark Fork long-term monitoring network. Sites 4-6 provide additional spatial resolution on inputs from major hydrologic sources; the combined flow of the Clark Fork at St. Regis (site 5) and Flathead River at Perma (site 6) represents essentially the total flow of the Clark Fork in the reach near Plains.

1. Clark Fork at Turah Bridge, near Bonner (12334550)
2. Blackfoot River near Bonner (12340000)
3. Clark Fork above Missoula (12340500)
4. Bitterroot River near Missoula (12352500)
5. Clark Fork at St. Regis (12354500)
6. Flathead River at Perma (12388700)

In 2008, a new sampling site was established on the newly constructed bypass channel between Clark Fork at Turah Bridge and Milltown Reservoir (Clark Fork Bypass near Bonner-station 12334570). Data from this site is intended to distinguish between loads derived from the basin upstream from Clark Fork at Turah Bridge and loads derived from previously deposited channel sediments in the reach within and upstream from the former reservoir area. These areas are expected to actively erode as the river adjusts to the steeper gradient after the breaching of Milltown Dam.

Water-quality and streamflow data are used to estimate instantaneous trace-element loads passing each site at the time of sampling. These data are used to determine the trace-element loads transported during various flow conditions in order to assess the degree of scour or deposition of sediments through the breach of the former reservoir. The data also are used to determine the percentage of the total load at the downstream end of the reach (below Flathead River) derived from individual upstream sources.

The sampling period of March/April-June was targeted to characterize the rising limb and peak of the annual snowmelt hydrograph, and is the time when transport of metals and suspended sediment is at a



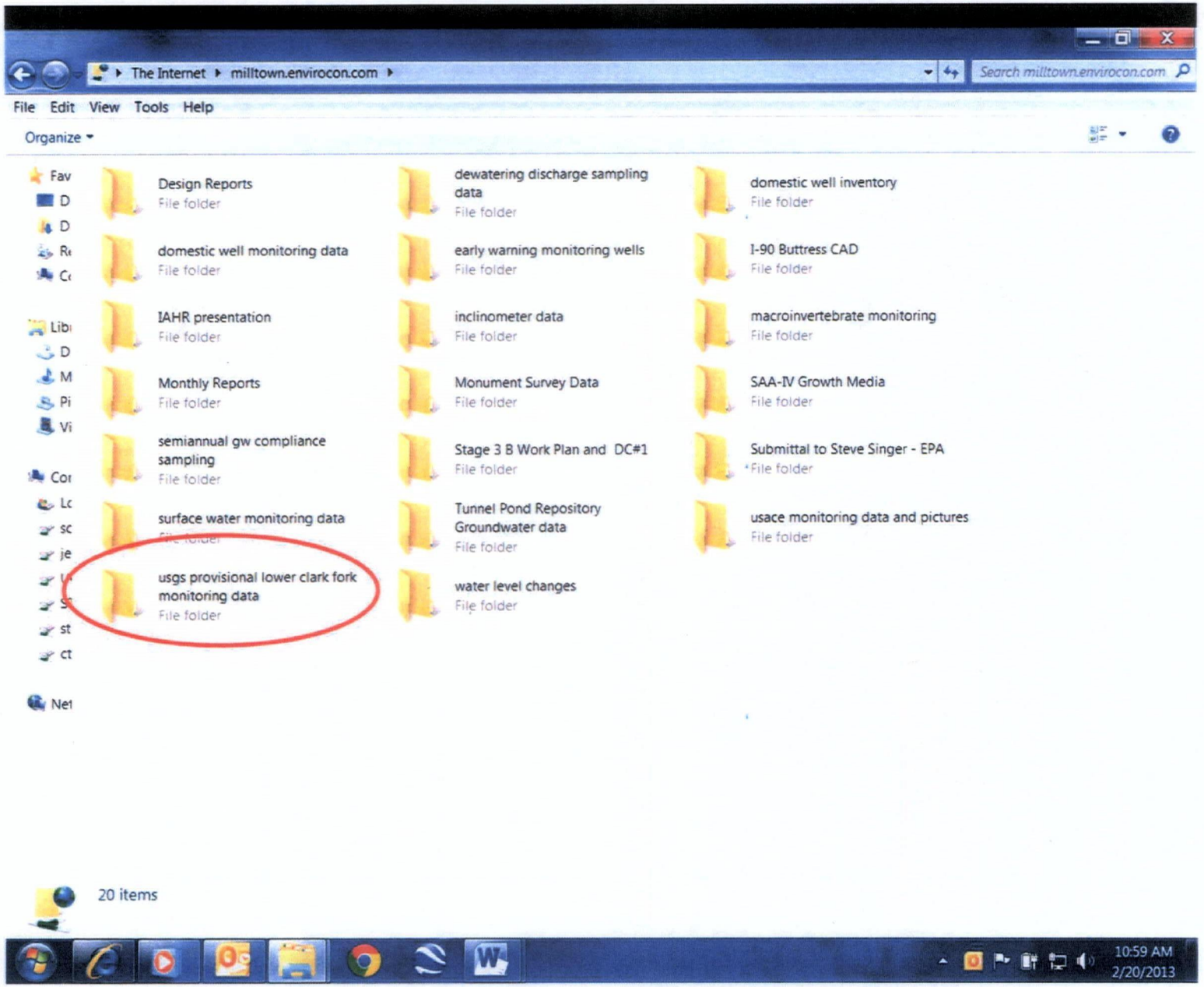
Milltown Dam (breached in March 2008)

maximum. Sampling frequency is about once-weekly during the March-June period. Additional samples may be collected for large runoff peaks or unique conditions associated with reservoir operations. Samples are analyzed for the same constituents (trace elements, hardness, suspended sediment) as in the upper Clark Fork long-term monitoring program. Total nitrogen and total phosphorus also are analyzed to provide supplemental information for nutrient concerns in the lower basin.

The provisional water-quality data and estimated instantaneous loads for sites in the lower Clark Fork basin are transmitted to USEPA as results become available. These data are then transferred to an ftp site administered by USEPA and Envirocon, Inc. (ftp://milltown.envirocon.com) that provides information related to activities at Milltown Reservoir. A report describing the transport of suspended-sediment and trace-element loads through Milltown Reservoir during water years 2004-07 is available at http://pubs.usgs.gov/sir/2008/5080. A similar report is being prepared for water year 2008.

U.S. Department of the Interior | U.S. Geological Survey
URL: http://mt.water.usgs.gov/projects/clarkfork/sampling.html
Page Contact Information: webmaster-mt@usgs.gov
Page Last Modified: Tuesday, 11-Dec-2012 17:32:16 EST

3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macroinvertebrate monitoring
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Monthly Reports
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Monument Survey Data
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Stage 3 B Work Plan and DC#1
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Submittal to Steve Singer - EPA
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surface water monitoring data
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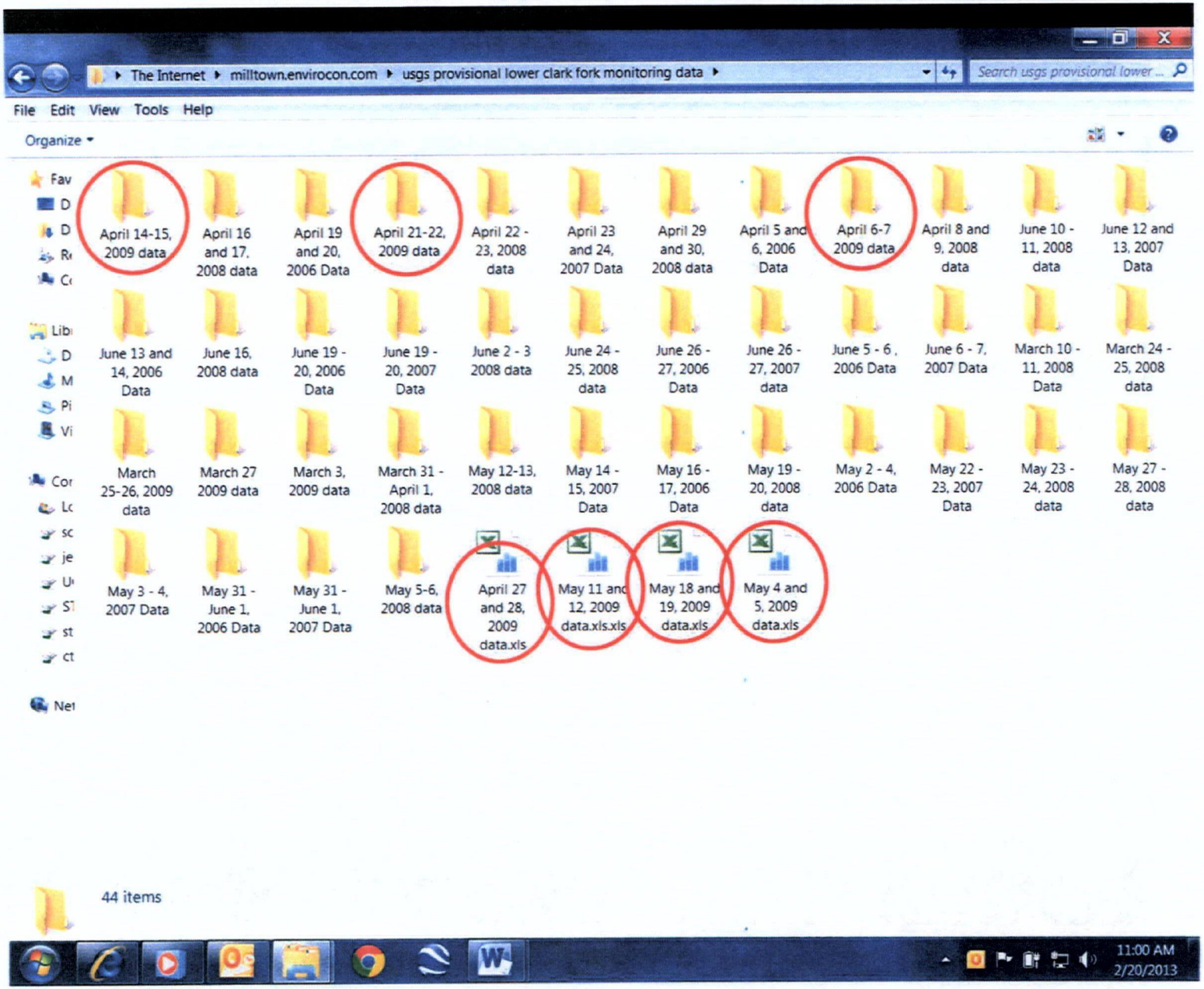
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April 19 and 20, 2006 Data
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April 29 and 30, 2008 data
April 5 and 6, 2006 Data
April 6-7 2009 data
April 8 and 9, 2008 data
June 10 - 11, 2008 data
June 12 and 13, 2007 Data
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June 16, 2008 data
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March 10 - 11, 2008 Data
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March 27 2009 data
March 3, 2009 data
March 31 - April 1, 2008 data
May 12-13, 2008 data
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May 2 - 4, 2006 Data
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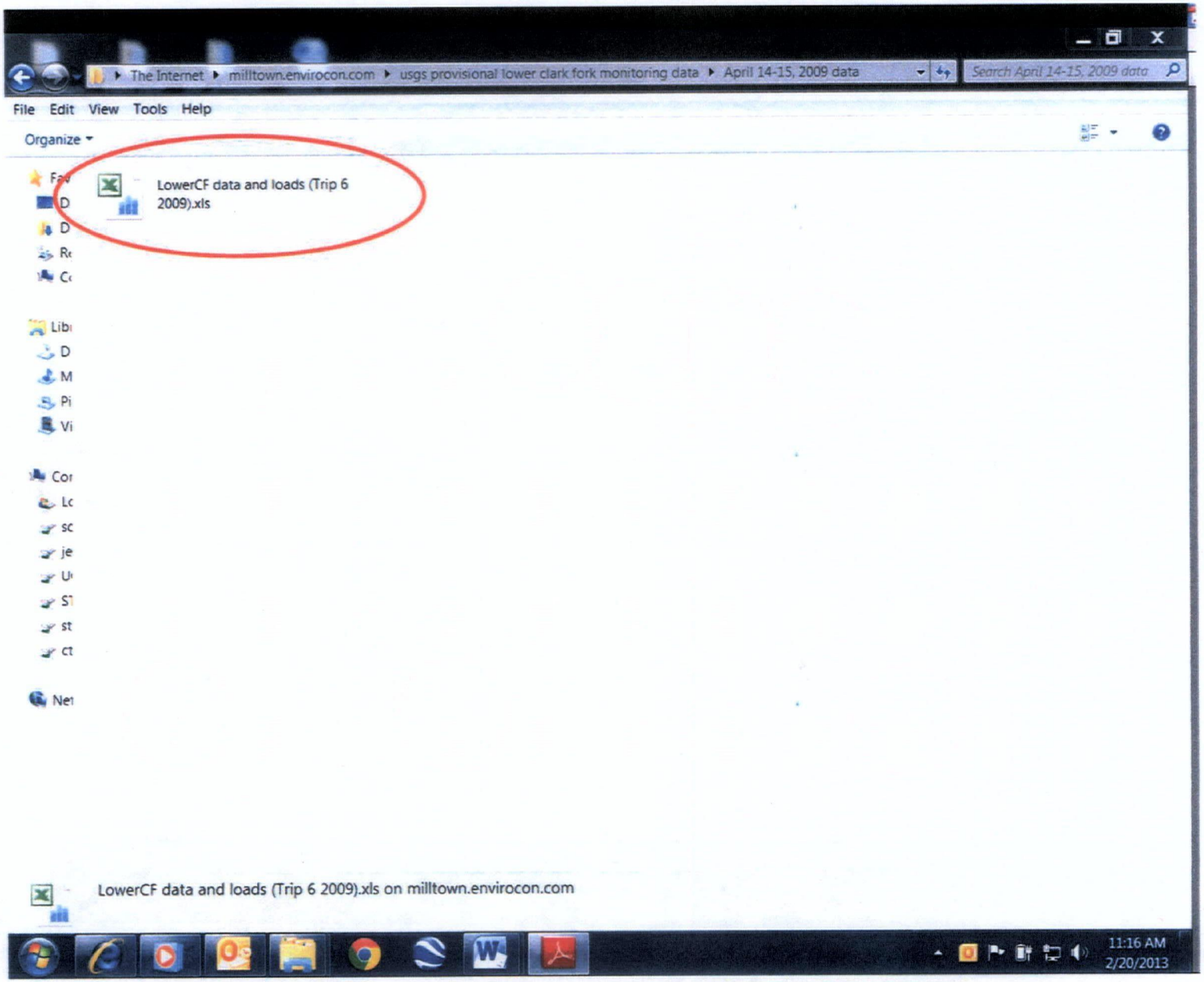
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LowerCF data and loads (Trip 6 2009).xls on milltown.envirocon.com
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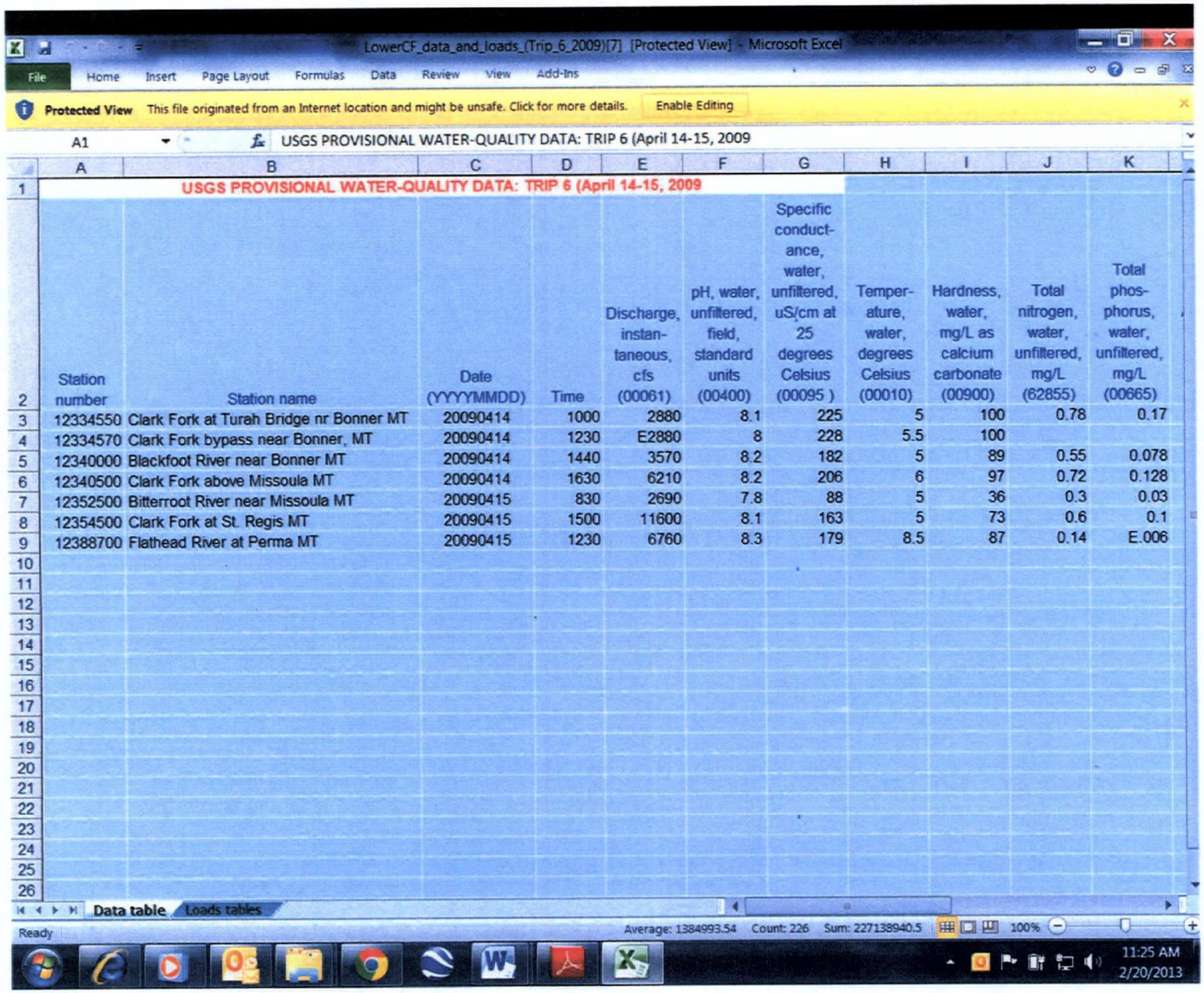

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A1 USGS PROVISIONAL WATER-QUALITY DATA: TRIP 6 (April 14-15, 2009

USGS PROVISIONAL WATER-QUALITY DATA: TRIP 6 (April 14-15, 2009

Station number	Station name	Date (YYYYMMDD)	Time	Discharge, instan-taneous, cfs (00061)	pH, water, unfiltered, field, standard units (00400)	Specific conduct-ance, water, unfiltered, uS/cm at 25 degrees Celsius (00095)	Temper-ature, water, degrees Celsius (00010)	Hardness, water, mg/L as calcium carbonate (00900)	Total nitrogen, water, unfiltered, mg/L (62855)	Total phos-phorus, water, unfiltered, mg/L (00665)
12334550	Clark Fork at Turah Bridge nr Bonner MT	20090414	1000	2880	8.1	225	5	100	0.78	0.17
12334570	Clark Fork bypass near Bonner, MT	20090414	1230	E2880	8	228	5.5	100		
12340000	Blackfoot River near Bonner MT	20090414	1440	3570	8.2	182	5	89	0.55	0.078
12340500	Clark Fork above Missoula MT	20090414	1630	6210	8.2	206	6	97	0.72	0.128
12352500	Bitterroot River near Missoula MT	20090415	830	2690	7.8	88	5	36	0.3	0.03
12354500	Clark Fork at St. Regis MT	20090415	1500	11600	8.1	163	5	73	0.6	0.1
12388700	Flathead River at Perma MT	20090415	1230	6760	8.3	179	8.5	87	0.14	E.006

Data table Loads tables

Ready Average: 1384993.54 Count: 226 Sum: 227138940.5 100%

11:25 AM 2/20/2013

05/20/2013 10:05
Serial No. AOP0011006208
TC: 162938

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Interface	Network
Language	PCLXL
Date	10:05:00 MAY 20 2013

USGS PROVISIONAL WATER-QUALITY DATA: (April - May, 2009)												
Station number	Station name	Date (YYYYMMDD)	Time	Discharge, instan-taneous, cfs (00061)	pH, water, unfiltered, field, standard units (00400)	Manga-nese, water, filtered, ug/L (01056)	Manga-nese, water, unfiltered, recover-able, ug/L (01055)	Zinc, water, filtered, ug/L (01090)	Zinc, water, unfiltered, recover-able, ug/L (01092)	Sus-pended sediment, % smaller than 0.063 mm (70331)	Sus-pended sediment concen-tration, mg/L (80154)	Sus-pended sediment discharge, tons/day (80155)
12334550	Clark Fork at Turah Bridge nr Bonner MT	20090406	1030	1180	8	9.8	42.7	3.4	14.7	81	13	41
12334570	Clark Fork bypass near Bonner, MT	20090406	1200	E1180	8.1	11.4	42.3	3.6	15.2	62	17	E54
12340000	Blackfoot River near Bonner MT	20090406	1400	1100	8.3	3.9	15.3	E1.2	E1.3	85	8	24
12340500	Clark Fork above Missoula MT	20090406	1530	2200	8.3	11.6	35.7	2.7	13.3	73	14	83
12352500	Bitterroot River near Missoula MT	20090407	745	1160	7.9	7.5	23.1	E1.0	E1.4	72	7	22
12354500	Clark Fork at St. Regis MT	20090407	1330	4760	8.3	5.9	31.7	E1.7	8	83	10	129
12388700	Flathead River at Perma MT	20090407	1100	6430	8.3	1.4	3.9	<2.0	<2.0	81	2	35
12334550	Clark Fork at Turah Bridge nr Bonner MT	20090414	1000	2880	8.1	7.4	207	4.8	72.2	74	99	771
12334570	Clark Fork bypass near Bonner, MT	20090414	1230	E2880	8	14.2	214	6.5	83.4	61	128	E997
12340000	Blackfoot River near Bonner MT	20090414	1440	3570	8.2	4.7	56.9	3.1	3.5	87	42	405
12340500	Clark Fork above Missoula MT	20090414	1630	6210	8.2	9.4	138	8	55.2	58	108	1810
12352500	Bitterroot River near Missoula MT	20090415	830	2690	7.8	4.5	25.1	5.4	6.7	76	21	153
12354500	Clark Fork at St. Regis MT	20090415	1500	11600	8.1	3.4	124	5.1	38.9	79	71	2220
12388700	Flathead River at Perma MT	20090415	1230	6760	8.3	1.2	5.1	E1.2	E1.2	86	4	73
12334550	Clark Fork at Turah Bridge nr Bonner MT	20090421	1020	2580	7.9	8.5	155	5	57.2	70	90	627
12334570	Clark Fork bypass near Bonner, MT	20090421	1210	E2580	7.9	12.2	171	8.3	74.9	54	126	E878
12340000	Blackfoot River near Bonner MT	20090421	1410	4410	8	5.8	61.2	<2.0	3.7	81	57	679
12340500	Clark Fork above Missoula MT	20090421	1610	7070	8.1	9.2	122	5.9	49.8	52	126	2410
12352500	Bitterroot River near Missoula MT	20090422	800	4400	7.5	3.9	72.6	8.5	5.8	60	98	1160
12354500	Clark Fork at St. Regis MT	20090422	1455	16700	7.9	5.1	135	3.1	47.5	65	132	5950
12388700	Flathead River at Perma MT	20090422	1210	7500	8.2	1.7	7.6	<2.0	<2.0	88	6	122
12334550	Clark Fork at Turah Bridge nr Bonner MT	20090427	1100	3520	8.3	8.3	96.7	6.3	48.2	73	46	437
12334570	Clark Fork bypass near Bonner, MT	20090427	1230	E3520	8.2	12.2	121	10.3	70.8	47	86	E817
12340000	Blackfoot River near Bonner MT	20090427	1430	4900	8.2	3.4	30.2	2.4	ND	86	28	370
12340500	Clark Fork above Missoula MT	20090427	1600	8300	8.2	8.8	68.9	ND	29.9	64	56	1250
12352500	Bitterroot River near Missoula MT	20090428	800	3740	7.7	6	18.5	6.5	ND	76	15	151
12354500	Clark Fork at St. Regis MT	20090428	1330	15100	8.1	3.5	56	4.9	20.1	76	40	1630
12388700	Flathead River at Perma MT	20090428	1130	11900	8.3	1	9	ND	ND	89	10	321
12334550	Clark Fork at Turah Bridge nr Bonner MT	20090504	1045	2680	8.3	5.7	72.5	5.7	27.9	68	34	246
12334570	Clark Fork bypass near Bonner, MT	20090504	1230	E2680	8.3	8.1	82.9	6.9	40	49	55	E398
12340000	Blackfoot River near Bonner MT	20090504	1400	3220	8.4	2.4	18.2	3.6	3	88	14	122
12340500	Clark Fork above Missoula MT	20090504	1525	6070	8.2	6.3	48.4	6	19.6	68	29	475
12352500	Bitterroot River near Missoula MT	20090505	800	3220	7.8	4	17.3	3.3	2.8	72	17	148
12354500	Clark Fork at St. Regis MT	20090505	1250	12000	8.2	2.7	34.2	3	15.3	79	20	645
12388700	Flathead River at Perma MT	20090505	1600	12000	8.4	1	5.8	3	3	84	5	162

12334550	Clark Fork at Turah Bridge nr Bonner MT	20090511	1030	3250	8.3	5.5	3.2	3.4	4.7	69	30	263
12334570	Clark Fork bypass near Bonner, MT	20090511	1200	E3250	8.4	15.1	69.7	3.9	27.4	55	38	E333
12340000	Blackfoot River near Bonner MT	20090511	1400	4070	8.4	2	18.2	<2.0	2.6	86	19	209
12340500	Clark Fork above Missoula MT	20090511	1530	6620	8.4	5.8	35.5	2.2	12.8	65	33	590
12352500	Bitterroot River near Missoula MT	20090512	730	4400	7.7	3.3	12.6	<2.0	2	56	19	226
12354500	Clark Fork at St. Regis MT	20090512	1330	15200	8.3	2.7	26.2	2.1	9.8	62	30	1230
12388700	Flathead River at Perma MT	20090512	1100	13800	8.4	0.9	4.6	<2.0	E1.1	79	8	298
12334550	Clark Fork at Turah Bridge nr Bonner MT	20090518	930	3860	8.1	7.6	83.9	2.8	32.8	55	59	615
12334570	Clark Fork bypass near Bonner, MT	20090518	1215	E3860	8.1	17.4	247	3.7	149	52	93	E969
12340000	Blackfoot River near Bonner MT	20090518	1415	5270	8.2	3.6	39.6	2	3.4	78	62	882
12340500	Clark Fork above Missoula MT	20090518	1615	9110	8.3	11.2	93	2.5	47	50	111	2730
12352500	Bitterroot River near Missoula MT	20090519	730	9240	7.5	5.1	98.7	<2.0	9.9	44	233	5810
12354500	Clark Fork at St. Regis MT	20090519	1330	25200	8.1	2.6	102	E1.9	37.2	43	203	13800
12388700	Flathead River at Perma MT	20090519	1100	13800	8.2	1.1	7	E1.3	<2.0	81	6	224

Solid and Hazardous Waste Bureau
Solid Waste Management
(406) 444-1430

TO: Stone Container Application File

FROM: Ed Thamke

DATE: April 1, 1992

SUBJECT: Summary from Site Visit on March 13, 1992

At the request of Stone Container Frenchtown Operations, Technical Director Larry Weeks, I visited the plant site on March 13, 1992. The purpose of the visit was to go through their preliminary Class II Solid Waste Management Facility License application, and to look at the existing solid waste disposal system. While at the site I also met Ed Scott who is the Environmental Coordinator for the plant.

Stone Container is in the paper bag and cardboard box manufacturing business. The Frenchtown Mill produces ~ 1900 ton of liner board for cardboard boxes per day. In doing this they use ~ 20 tons of wood fiber per day (~11% of the fiber is lost in processing). ~15 ton of ash is produced, per day, from the wet scrubber with an electrostatic precipitator. A dominant by-product from the operations is a liquid effluent (sludge), that is pumped out to a series of holding ponds throughout the plant site. It was stated that: the sludge contains 1% wood fiber, ash, lime and water. The liquid is decanted back through the airation basin, with some perculation downward from the pond bed. These facts need to be verified. Mike Pasichnyk at water quality has been dealing with Stone on this issue.

The current solid waste disposal areas are intermingled with the drying beds. The proposed landfill area is located in an old drying bed. The solid waste areas are unmanagable because they are spread all over the property. Disposal areas are generally unattended, in the flood plain or in standing water, and are not covered daily.

The following is to provide a detailed explanation of the slides I took while at the facility.

SLIDE #
7) Sludge being discharged into the #4 pond. It had been stated that this pond was not being used, but a couple of seconds later the effluent came out. It was explained to me that there must have been a problem somewhere, and this pond was sometimes used for emergencies.

8) #4 Pond away from where effluent was entering.

SLIDE#

9) One of numerous empty drums of dye. Shows the NFPA 704 M Hazard Identification Label. This does not make it a hazardous material, just is a system for identifying Health Hazards (Blue), Flammability Hazard (Red), Reactivity Hazard (Yellow), Special Information (White). See attatched information, Section 2 Part 3.

10) Another material container with label. Ed Scott was unsure what it was for.

11) Current waste disposal area A, standing about in the middle of it, looking North-east toward plant. Was unsure when it had last been covered.

12) Standing on waste disposal area A, looking west toward sludge pond #5. (Currently in use)

13) Ed Scott standing at another disposal area in S.E corner of Area A. Cull paper rolls in background.

14) Picture of disposal area immediately behind where Ed Scott was standing in last slide. The waste is throughout the standing water. Located directly adjacent to sludge pond #4.

15) Primary clarifier from west, looking east toward plant.

16) Standing at edge of clarifier looking south toward Mizzo. Another pile of waste, mostly metals in distance.

17) Area B, proposed future landfill site. A former sludge pond.

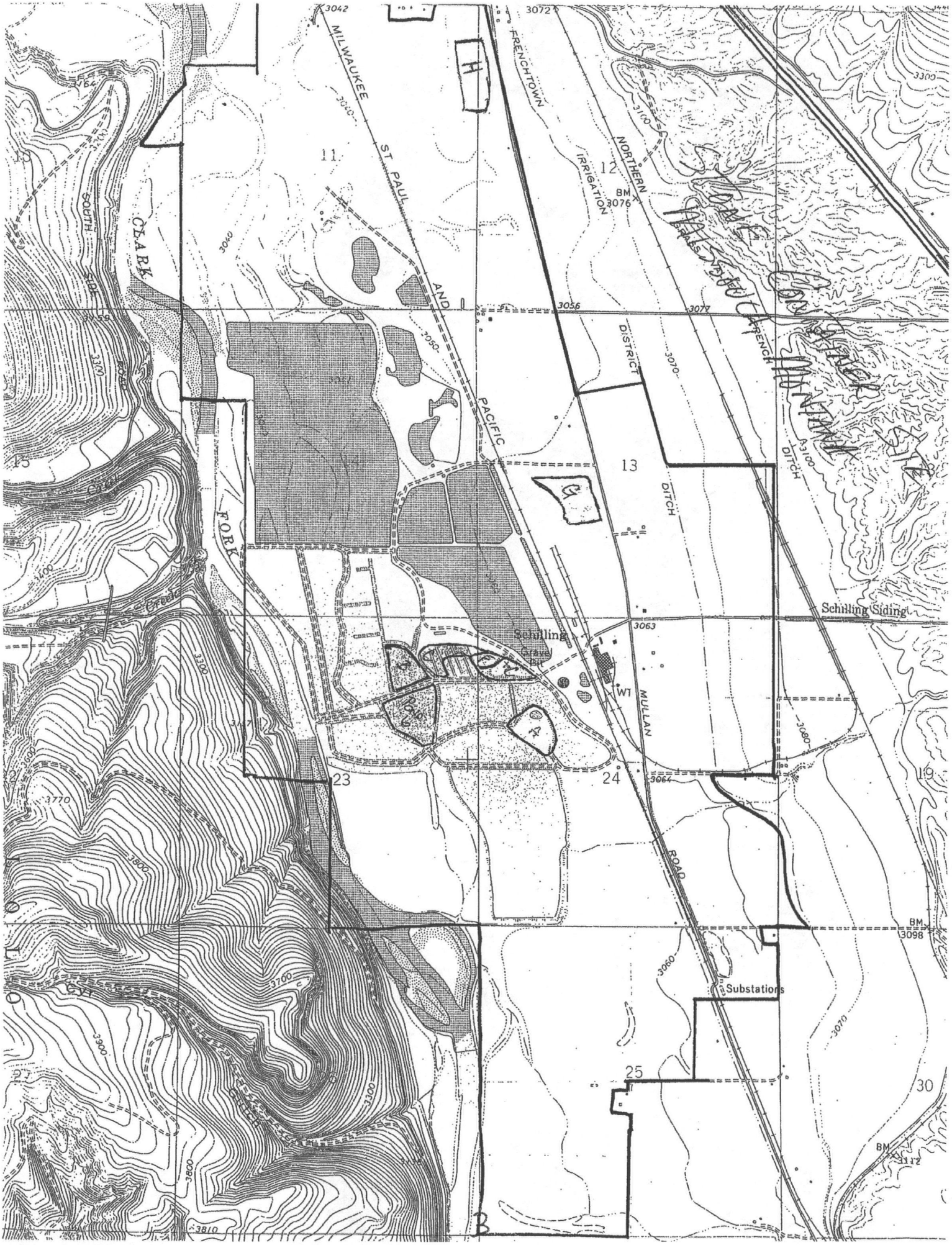
18) Ash disposal area. Other wastes mixed in throughout.

19) On Site asbestos disposal area. Asbestos bags piled in dumpster waiting for burial in background.

20) Another shot of asbestos area, showing full BFI container.

21) Looking N.W. toward Stone Container facility from Mullen Road.

My feeling is that this is licensable situation, but alot of cleanup, and a better proposed disposal site will be needed. The E.A. will have to be a good one to get through the public comment period for Missoula County.


MILWAUKEE ST PAUL AND PACIFIC
FRENCHTOWN IRRIGATION DITCH
NORTHERN DITCH
DISTRICT
CLARK FORK
SOUTH FORK
Schilling
Gravel Pit
Schilling Siding
MULLAN ROAD
Substation
BM 3076
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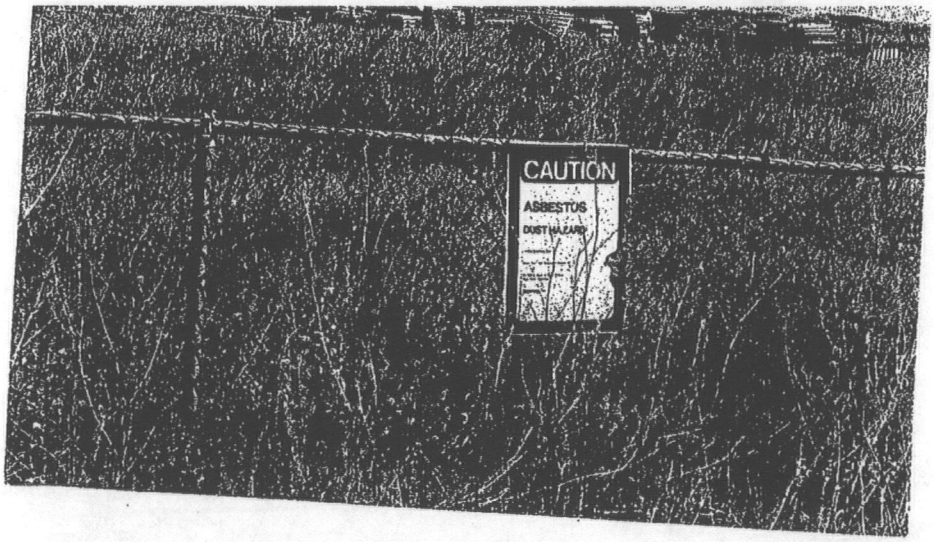
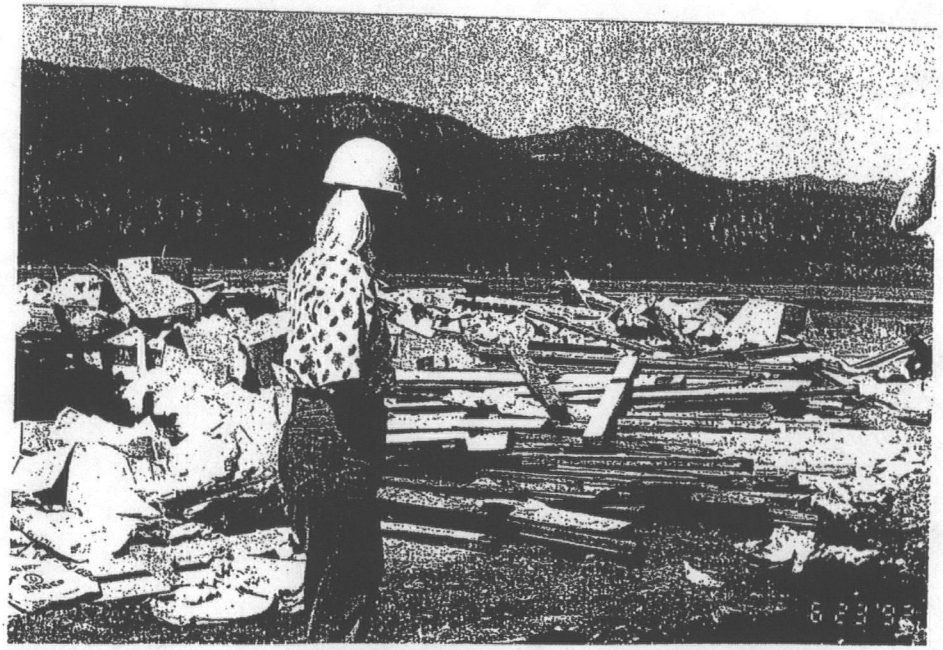
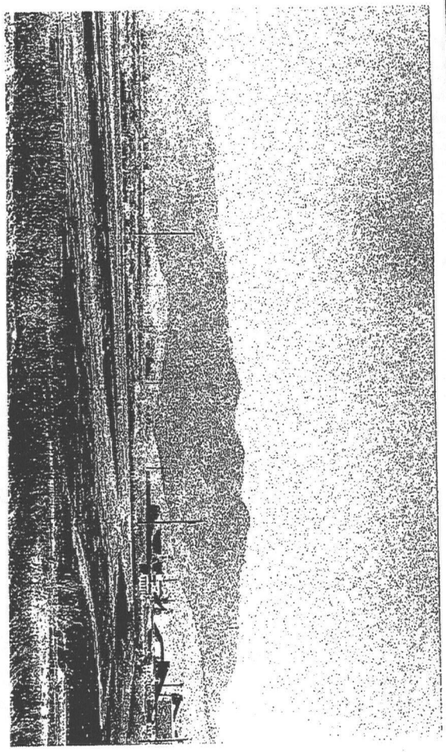
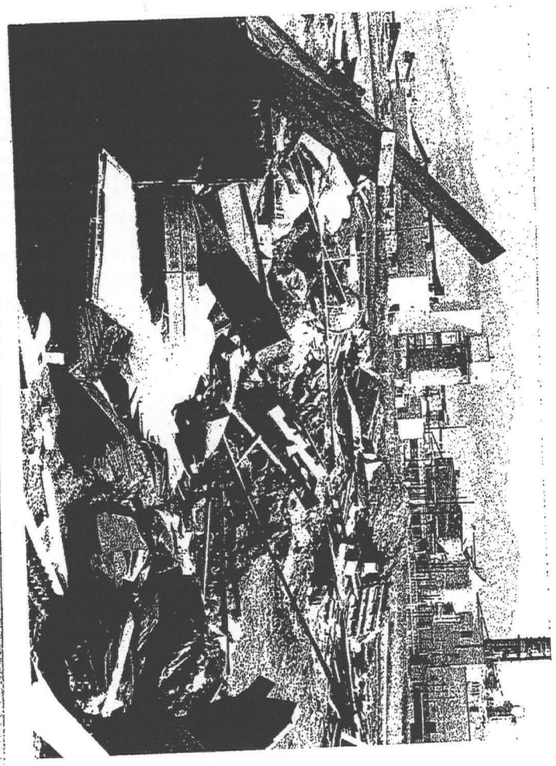


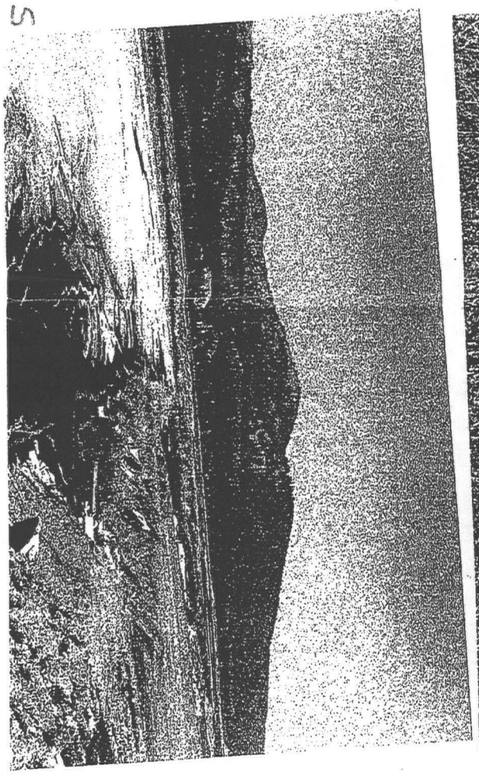
Stone Container
Jim Wilbur
7/2/92

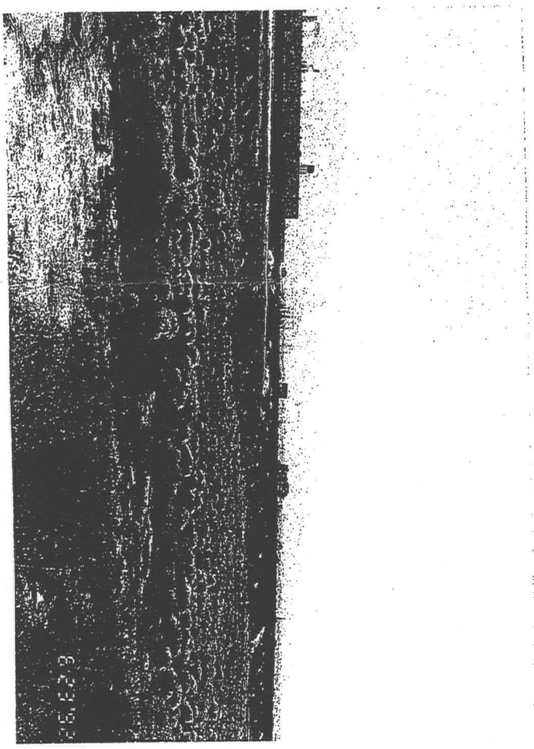


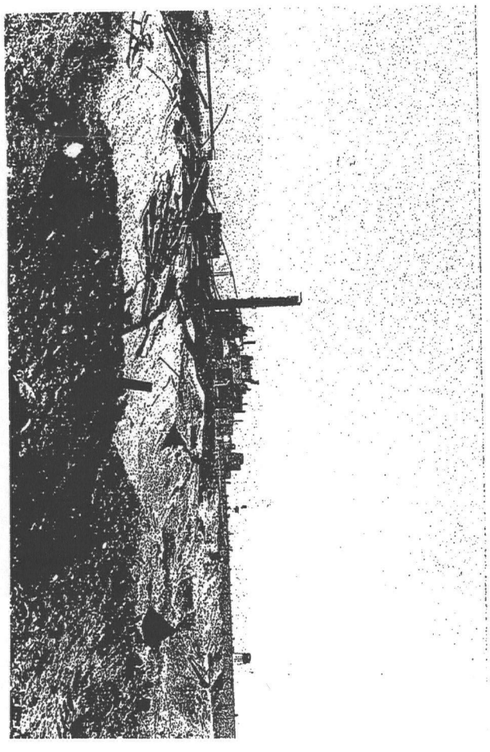
Stone Container
Jim Wilbur
7/2/92

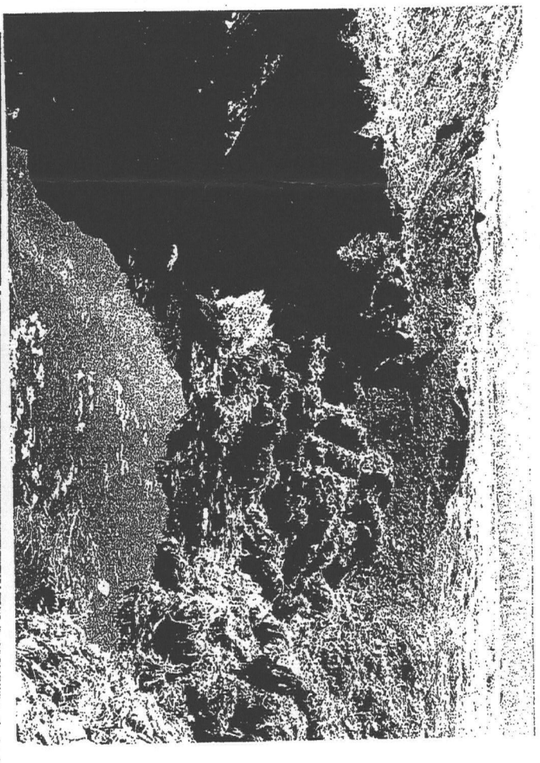










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NET WT 250 LBS
HEALTH 1
FLAMMABILITY 1
REACTIVITY 1
PERSONAL PROTECTION

Slide 9

Slide 11

8

Slide 12

Slide 14

Slide 18

unnumbered slide

Stone Container Corporation

Containerboard and Paper Division

Missoula Mill

Mullan Road
P.O. Box 4797
Missoula, Montana 59806-4707

Phone [illegible]
FAX [illegible]

May 5, 1993

Mr. Jim Wilbur
Solid & Hazardous Waste Bureau
Cogswell Building
Helena, MT 59620-0901

Dear Mr. Wilbur:

This letter is in response to your reply (dated February 11, 1993) to Stone Container's Solid Waste Management System License Application. This application was submitted on July 27, 1992.

After reviewing the comments expressed in your response, Stone met with several consultants to pursue our solid waste disposal options. At this time Stone Container does not think that it will be feasible to continue utilizing the existing landfill sites. Therefore, it is Stone's intention to work towards closing those landfill sites prior to October 1993 and seek an alternative to its current disposal practice.

Once the landfills are closed, Stone will temporarily dispose of its wastes at the local BFI landfill while other options for waste disposal continue to be evaluated.

The current options being studied include:

1) Permit and construct a Class II landfill.

2) Permit and construct a Class III landfill.

3) Continue utilizing the existing commercial landfill (BFI).

4) Waste reduction, recycling, and alternative methods of disposal.

5) Permitting the existing landfarm for petroleum contaminated soils.

6) A combination of the above options.

Damschen and Associates has been retained to examine the feasibility of these options and to assist in the

development of closure plans for the existing landfills.

Consistent with the closure plans being developed by Damschen, Stone will phase out the use of its existing landfills in an orderly manner. To help keep the Bureau appraised of actions being taken to address our solid waste issues, we will provide monthly status reports. In addition, once Damschen has progressed to the point of developing closure plans and waste disposal methods, we would like to meet with you to discuss them in detail. This should assure that our solid waste disposal objective is consistent with state requirements.

If you have any questions, or need any more information, please feel free to contact me at 626-4451.

Sincerely,

Laura Kosmalski

Laura Kosmalski
Environmental Engineer

cc: Stuart
Weeks
Scott
Willhite
Kohl
Anderson
Eastlick
Barry Damschen-Damschen & Assoc.

Memorandum

To: Kent Alexander 2/12/13

From: Lisa Tyson 10/17/12

Date: 10/17/2012

Re: Smurfit Stone Mill

The data validation reports for Dioxins and Furans by Method 8290A for Smurfit Stone Mill (i.e., WG1388882, WG1384708, WG1387470, and WG1388181) included a statement that indicated "Various detected results were flagged "R" by the laboratory indicating that the ion abundance ratios for these compounds did not meet acceptance criteria. Therefore, these "R" flagged results in all samples were qualified as estimated "J". [Note: The laboratory's "R" flag (for ion abundance ratios) is different from the validation "R" flag used for rejected results.]." The ion abundance ratios are most likely not meeting criteria due to a possible interference and therefore, these results should be considered estimated with high bias "J+".

The samples effected included SSGW03, SSGW04, SSGW05, SSGW07, SSGW08, SSGW10, SSGW11, SSGW12, SSGW18, SSGW24, SSGW25, SSGW26, SSGW89, SSGW99 in SDG WG1388882; SSSE01, SSSE02, SSSE03, SSSE04, SSSE05, SSSE06, SSSE07, SSSO0102, SSSO0202, SSSO0302, SSSO0402, SSSO0802, SSSO1302, SSSO1502, SSSO1602 in SDG WG1384708; SSSE08, SSSE09, SSSE10, SSSO0514, SSSO0612, SSSO0902, SSSO0916, SSSO1002, SSSO1102, SSSO1110, SSSO1202, SSSO1306, SSSO1402, SSSO1702, SSSO8902, SSSO9902 in SDG WG1387470; and SSGW02, SSGW13, SSGW14, SSGW15, SSGW16, SSGW17, SSGW23, SSGW27, SSSW01, SSSW02, SSSW03, SSSW04, SSSW05, SSSW06, SSSW07, SSSW08, SSSW09, SSSW10 in SDG WG1388181.

UOS

URS Operating Services, Inc.
999 18th Street, Suite 900
Denver, Colorado 80202
Tel. (303) 291-8209
Cell: (720) 474-4500
FAX: (303) 291-8296
Email:kent.alexander@urs.com

Kenton J. Alexander
Principal Chemist / Subcontracts Manager

Miller, Jeff

From: Tyson, Lisa <LTyson@TLISolutions.com>
Sent: Wednesday, February 20, 2013 11:34 AM
To: Miller, Jeff
Subject: RE: Request for signature and date

Hi Jeff-
Here's the info...let me know if you need anything else.

Lisa Tyson, PMP
Project Manager
TLI Solutions, Inc.
560 Golden Ridge Road, Ste. 130
Golden, CO 80401
303-763-7188
ltyson@tlisolutions.com

-----Original Message-----
From: Miller, Jeff [mailto:jeff.miller@urs.com]
Sent: Wednesday, February 20, 2013 10:28 AM
To: Tyson, Lisa
Subject: RE: Request for signature and date

Hi again Lisa,
Sorry, could you please send me your title, affiliation and contact information as well? I need to attach it to the memo.
Thanks!
Jeff

Jeff Miller, Senior Environmental Scientist URS Operating Services, Inc.- 999 18th Street, Suite 900, Denver, CO 80202
(303) 291-8212 (office-direct), (720) 810-0790 (cell)

-----Original Message-----
From: Tyson, Lisa [mailto:LTyson@TLISolutions.com]
Sent: Wednesday, February 13, 2013 7:13 AM
To: Miller, Jeff
Cc: Alexander, Kent
Subject: RE: Request for signature and date

Hi Jeff-
Please see attached.

Lisa

-----Original Message-----
From: Miller, Jeff [mailto:jeff.miller@urs.com]
Sent: Tuesday, February 12, 2013 3:52 PM
To: Tyson, Lisa
Cc: Alexander, Kent